<110> Ruben et al.

<120> 62 Human Secreted Proteins

<130> PZ039P1

<140> Unassigned
<141> 2000-10-10

<150> PCT/US00/08979
<151> 2000-04-06

<150> 60/128,693
<151> 1999-04-09

<150> 60/130,991
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aggcaagctt gaggtatagt aggaagaaca cacattatgg agtcagacct gactgagtta   1200
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<210> 17
<211> 2163
<212> DNA
<213> Homo sapiens

<400> 17
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ggaaccgcag cggcggccac ggctactggg acggcggcgg ggccgcgggc gctgagggc       180
cggcgccggc ggggacactg agccccgcgc ccctcttcag ccccggcacc tacgagcgcc       240
tggcgctgct gctgggctcc attgggctgc tgggcgtcgg caacaacctg ctggtgctcg       300
tcctctacta caagttccag cggctccgca ctcccactca cctcctcctg gtcaacatca       360
gcctcagcga cctgctggtg tccctcttcg gggtcacctt taccttcgtg tcctgcctga       420
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caaactccca tatatttgct tcccccaaat tgctgcccct acagactcaa agctctttt      1980
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ggg                                                                     2163
```

<210> 18
<211> 703
<212> DNA
<213> Homo sapiens

<400> 18
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gacagttaac agtggtgtga catccagaga gcagctgggc tgctcccgcc ccagcccggc       180
ccagggtgaa ggaagaggca cgtgctcctc agagcagccg gagggagggg ggaggtcgga       240
ggtcgtggag tggtttgtgt atcttactgg tctgaaggga ccaagtgtgt ttgttgtttg       300
ttttgtatct tgttttctg atcggagcat cactactgac ctgttgtagg cagctatctt       360
acagacgcat gaatgtaaga gtaggaaggg gtgggtgtca gggatcactt gggatctttg       420
acacttgaaa aattacacct ggcagctgcg tttaagcctt cccccatcgt gtactgcaga       480
gttgagctgg caggggaggg gctgagaggg tggggctgg aacccctccc cgggaggagt       540
gccatctggg tcttccatct agaactgttt acatgaagat aagatactca ctgttcatga       600
atacacttga tgttcaagta ttaagaccta tgcaatattt tttacttttc taataaacat       660
gtttgttaaa acaaaaaaaa aaaaaaaaa aaaaaaaaa aaa                            703
```

<210> 19
<211> 774
<212> DNA
<213> Homo sapiens

<220>
<221> SITE

<222> (760)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (763)
<223> n equals a,t,g, or c

<400> 19

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cctctgtcca ctgctttcgt gaagacaaga tgaagttcac aattgtcttt gctggacttc      60
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acaatgctgg aagtgggcag cagtcagtga gtgtcaacaa tgaacacaat gtggccaatg     180
ttgacaataa caacggatgg gactcctgga attccatctg ggattatgga aatggctttg     240
ctgcaaccag actctttcaa aagaagacat gcattgtgca caaaatgaac aaggaagtca     300
tgccctccat tcaatccctt gatgcactgg tcaaggaaaa gaagcttcag ggtaagggac     360
caggaggacc acctcccaag ggcctgatgt actcagtcaa cccaaacaaa gtcgatgacc     420
tgagcaagtt cggaaaaaac attgcaaaca tgtgtcgtgg gattccaaca tacatggctg     480
aggagatgca agaggcaagc ctgttttttt actcaggaac gtgctacacg accagtgtac     540
tatggattgt ggacatttcc ttctgtggag acacggtgga gaactaaaca atttttaaa      600
gccactatgg atttagtcat ctgaatatgc tgtgcagaaa aaatatgggc tccagtggtt     660
tttaccatgt cattctgaaa tttttctcta ctagttatgt ttgatttctt taagtttcaa     720
taaaatcatt tagcattgaa aaaaaaaaa aawwaawaan aanaaaaaaa aaaa            774
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<210> 20
<211> 1549
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (873)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (895)
<223> n equals a,t,g, or c

<400> 20

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gcgagaggaa catttggcta aaatatttga tgaaattcta ctgcaggtgt ttccaaagtt     180
tccgtatgac ccatcattta acgaagcaac agcagtcaga tccattacaa agacagacat     240
gagaaaagga accagcattg cttggaattc tcctaaacca gaatatttcc ttggcagtgt     300
ggacaaaatt cctgataaag atcacctttc agaggagaag aattttaaag aatcctgtct     360
gttcgacagg gatttaagag agcagttaac tactatagat aaagaaacac ttcaaggagc     420
agctaaacca gatgctcact ttaggactat gccctgcggg cagcttctgc acttcctgca     480
gaggaacacc atcatcgcca ccgtctcagg ggtggccatc ctcatggcca tcgtgctgtt     540
gctgcttggg ttggcctcat acatcaggaa gaaacagcca tcatctcctc tggcaaacac     600
gacatataat attttttataa tggatggaaa gacatggtgg cacaattctg aagaaaaaaa     660
tttcacaaaa cttgcaaaaa aacagaaaca gttgaagagc agctcctgtg tctaagccag     720
gtcgtggggc cgtcaaacca ggacttgaaa ccacaatgcg aggacattct ccatctgcgc     780
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ggggcggtgg caccagaaaa atgctatgaa cctgaacttg cagaaagcac tggaagagaa    1440
atatggagaa aacagcaaat ccaagagctc caagtactag ttttgacaca gtagaggtgt    1500
cttctactca aataaagtgc taacaataag gaaaaaaaaa aaaaaaaa                 1549
```

```
<210> 21
<211> 1189
<212> DNA
<213> Homo sapiens

<400> 21
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tggccagcct ggggctgctg ctcctgctct tactgacagc actgccaccg ctgtggtcct     180
cctcactgcc tgggctggac actgctgaaa gtaaagccac cattgcagac ctgatcctgt     240
ctgcgctgga gagagccacc gtcttcctag aacagaggct gcctgaaatc aacctggatg     300
gcatggtggg ggtccgagtg ctggaagagc agctaaaaag tgtccgggag aagtgggccc     360
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ggaggccatt ctcagctggc agaaacagca ggaaggatgc ttcgggggagc ctgatgctga     840
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gccagaagag gccgctgcct tgtcatcggt tctctggttc ccagcttaca gctcttccct    1080
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agcaataaaa ccttctggga cattaaaaaa aaaaaaaaaa aaaaaaaa                 1189


<210> 22
<211> 2460
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (172)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2457)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2459)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2460)
<223> n equals a,t,g, or c

<400> 22
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gccagagcgg tgtccagcgc ggtgtagccg cagccgccgc tgtcaggcgc ancaacgggc     180
aaccccgtag aagtcggtcg gcaggtcctc tccaacccgc cgctaccgcg ccgctgtggg     240
agagacccca gcaggagccc aarggcagct acggggggcgc gaaggccgct ggcgccgcct     300
cggccagccc ttcccgcgcg gttccactgc cttaaggatg acagtcgtag ggaaccctcg     360
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agtggggaccc taccataacc ctcaggaaac ttaccactac tatcagcttc cagtctgctg     540
ccctgagaag atacgtcaca aaagccttag cctgggtgaa gtgctggatg gggaccgaat     600
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ggctgagtct ttgtatgaga tccgctttcg ggaaaacgtg gagaagagaa ttctgtgcca      660
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tctgtatggc agaactattg ctgttctctc cctttcttca tgccctgttg aactctccta     2220
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ttgggcattc cttccccaga gagggcctgg aaattataaa tctctatcac ataaggatta     2340
tatatttgaa cttttttaagt tgcctttagt tttggtcctg attttttcttt ttacaattac     2400
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```

<210> 23
<211> 4386
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3477)
<223> n equals a,t,g, or c

<400> 23

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aagagcgccc aatacgcaaa ccgcctctcc ccgcgcgttg ccgattcat taatgcagct      180
ggcacgacag gtttcccgac tggaaagcgg gcagtgagcg caacgcaatt aatgtgagtt      240
agctcactca ttaggcaccc caggctttac actttatgct tccggctcgt atgttgtgtg      300
gaattgtgag cggataacaa tttcacacag gaaacagcta tgaccatgat tacgccaagc      360
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ctagaactag tggatccccc gggctgcagg aattcggcac gagcgacatg gcgctgaggc      480
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ggggctgcct gatagggget gtaaatctca aatccagcaa tcgaacccca gtggtacagg      600
aatttgaaag tgtggaactg tcttgcatca ttacggattc gcagacaagt gaccccagga      660
tcgagtggaa gaaaattcaa gatgaacaaa ccacatatgt gttttttgac aacaaaattc      720
agggagactt ggcgggtcgt gcagaaatac tggggaagac atccctgaag atctggaatg      780
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gtgcatacag acgtggctac ttcatcaaca ataaacagga tggagaaagt tacaagaacc     1320
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<223> n equals a,t,g, or c

<220>
<221> SITE

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<212> DNA
<213> Homo sapiens

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13

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<211> 2707
<212> DNA
<213> Homo sapiens

<400> 26
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<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<210> 29
<211> 1481
<212> DNA

<213> Homo sapiens

<400> 29

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ccttgccctg gagctcttgg gaagggctgg gggttcccag ccggccctcc ggagccgggg        180
gactgcgacg gcctgtcgcc tggacaacaa ggaaagcgag tcctggggggg ctctgctgag       240
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tggggtcttc ccgttgcttg tcattcccct agagatgggg accatgctgc gctcagaagc        360
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<210> 30
<211> 1012
<212> DNA
<213> Homo sapiens

<400> 30

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cctgctggct ggccccaaa agattgcagc caaatgtggt ctcatccttg cctgccccaa         180
aggattcaaa tgctgtggtg acagctgctg ccaggagaac gagctcttcc ctggccccgt        240
gaggatcttc gtcatcatct tcctggtcat cctgtccgtc ttttgcatct gtggcctggc        300
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gcaacctcct ccccagtgcc tcctggatca agctagagac tgctggcacc ccaggaatgt        600
ccctgcccat cctgccgtgt ctctgttcat tcttggattt aacttattac ttttttctgct       660
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caacagtaga atgggctact gtgaggggta gtaagagccc catttctgga ggtatgcaaa        840
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ggactggatg agccctgagc cagcttccac tcctacctga atagagaact cactgcaccc        960
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<210> 31
<211> 1886
<212> DNA
<213> Homo sapiens

<400> 31

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taatttgtgt tccccattag catctaattt caagagcagg caaatctcat ctgttcccat        180
ccagcccagc cagggaacct ccagagttgc tttgcagata tggtgtggat cctgcagaat        240
gaggatgagc tcttccacga tccacattct tgccctttaa aaaataaagc gggtaggcag        300
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cggggtggcg gtgtggggtg tgtggggcaa gagctagagc gttcctcctc agtgagtttg    360
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ttgtattaat ttagtgatgt cttcaaaagg gtgtggtgga ggaggagtct cattcagaat    480
gagaagctga tcccagctcc caggaaatcg acacagttgc tggtgtgtag tggtcagcac    540
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gagcttgcag tgagccgaga tcgcgccact gcactccagc ctgggggaca gagcgagact   1860
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<210> 32
<211> 2406
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1934)
<223> n equals a,t,g, or c

<400> 32
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gattggccct cattcagtga gttctgtggt tccagtaagg atttgtatgt acatacgctc    420
ttgtcttacg tttttgggtac tcttgtctca tctgtttag ctgtgcgttt cttttcaggg    480
tgtactcgac cagccatgca ctagtgtaaa tcccgaacgg acagacttgg aacataaggc    540
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caggttgggt tttgctgttc gccgtctccc aggccacaag gcttgcctga ggggaatcgc    780
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ttcctcttaa ctcaaatcca ccgcaaaaat gatgaatcac tttaatagaa acgttaaaca    900
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tgttgtattt ctatacagta gcttgaaatt tattaactta tactgtaggt gttatgtatt      2340
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aaaaaa                                                                  2406


<210> 33
<211> 2623
<212> DNA
<213> Homo sapiens

<400> 33
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ggccgcactc gcgctgtacg ggccgccact ggacgcagtt ttagaaagag cgttttcgct        180
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acctcctctg tcttccacaa agcacaaagg gcaagatgga agaataggcg tagttggagg        300
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cgcggatggc ctgtggctgg tcgctcagca gccggccctc atccatggct accggaaggc        660
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tgtctacatg tgaactttttc cagaaaaact gtgccatgga cattttttcct ctggggaatt    2520
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aaaaaaaaaa aaaaaaaaaa aattcctggg gccgcgaatt ctt   2623

<210> 34
<211> 1461
<212> DNA
<213> Homo sapiens

<400> 34
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tcaaaaaaaa aaaaaaaaaa a   1461

<210> 35
<211> 953
<212> DNA
<213> Homo sapiens

<400> 35
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aatgttacca ctttgtgttt caacgatatc gcctkgagca ctatactgtg acatcgaatt   180
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ttcctactga catgaatgac cagaatctag aagagccatc cagatatatt gatatcagta   540
aatgccatta tttagtggat ttggacacca tgagagaaac accccgggag ccaaaatatt   600
catccaataa agaagaatgg atcagcttgg cctatagacc attccttgat gcttctagat   660
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taaactacac catcctcaaa ccccggaaag caaagcaaat caggaagaaa agtggaggtt   780
agcaacacac ctgtggcccc aaaggacaac catcttgtta actattgatt ccagtgacct   840
gactccctgc aagtcatcgc ctgtaacatt tgtaataaag gtcttctgac atgaaaaaaa   900
aamaaaaaag gcggccgct ctagaggatc caagcttacg tacgcgtgca tgc   953

<210> 36
<211> 1340
<212> DNA
<213> Homo sapiens

<220>

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<221> SITE
<222> (851)
<223> n equals a,t,g, or c

<400> 36
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<210> 37
<211> 2199
<212> DNA
<213> Homo sapiens

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gcctcccttc tggtcgccaa cacctggttc attgtggtcg ctgccatcca ggacaatcgc       180
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cccacttgcc atctcggtca tcacgctggg agccacccag ccccgggaag tctatacgag       420
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atatttaatg gcttcaagca ggtacttctc tgtgcattat agaatagatt ttaataatct    2040
tatagcattg tatattatta ttgctgttgt cactgttatt attattgtgg atactggccc    2100
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<210> 38
<211> 989
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (955)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (979)
<223> n equals a,t,g, or c

<400> 38
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gcagtgctga ggacgctgag ggacaccccg atgatggtcc acacaggccc ctgctgctgc    180
tgctgcccct gctgtccacg gctgctgctc accaggaaga agcttcagct gctgatgttg    240
ggcccttcc aatacgcctt cttgaagata acgctgaccc tggtgggcct gtttctcatc    300
cccgacggca tctatgaccc agcagacatt tctgaggga gcacagctct atggatcaac    360
actttcctcg gcgtgtccac actgctggct ctctggaccc tgggcatcat ttcccgtcaa    420
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ctcatcctga ctgccctaca gccctccatc ttctcagtct tggccaacgg tgggcagatt    540
gcttgttcgc ctccctattc ctctaaaacc aggtctcaag tgatgaattg ccacctcctc    600
atactggaga cttttctaat gactgtgctg acacgaatgt actaccgaag gaaagaccac    660
aaggttgggt atgaaacttt ctcttctcca gacctggact tgaactcaaa gcctaaggtg    720
gatggcttgg acaatgaaag gatgctgtac tcattagaat acaagattcc tttactgtcc    780
ctcaaccttg accaaatggg aagcattccc ccttgtcaac acaagctggc agatacattt    840
gactctacag atgaaggtga acaatgttag gataaaattg ctttggatct tgcctggaag    900
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aaaaaaaaaa aaaaaaaana aaaaaaaaa                                      989
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<210> 39
<211> 2048
<212> DNA
<213> Homo sapiens

<400> 39
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cttgaggccg agtgaacgtg gttttggaag attgcttaaa caaagaatgg aggccagagt    180
ggtgcacgca ttgcagaaaa ggcaagtgtc acttctttgt gtgtttctgg gagtgtcttg    240
ggctggcgca gaacctcttc ggtattttgt ggcagaggaa acggagagag ggacctttct    300
ggccaaccta gcaattgatc tggggttagg ggtggaggaa ctgtcagctc ggggatgtag    360
aattgtttca gatgagacca taggattttt actcctcaat ccgcttactg gtgatttact    420
tctaaatgag aaattagacc gagaggaact gtgtggcccc acagagccat gtgtgttgcc    480
tttccagttg ttacttgaaa agccttttca gatttttccgt gctgaactat gggtcagaga    540
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taccactcca ggggcaacat ttctcctaga aagtgcacat gattcagatg ttggaatcaa    660
caacctgaga aactacacca tcagctccaa tgtttatttc catattaatg tccatgataa    720
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caccctcata cgcatcctgg ttttggacat aaatgacaac gtccctgaat ttgtagagtc    900
gctttacaag gtccaggtgc ctgagaacag ccctgttggt tccctggttg tcactgtgtc    960
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cgaattgaac tacgaggcaa tacaaactta tacattaact attcaggcca aagatggtgg      1140
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<210> 40
<211> 2694
<212> DNA
<213> Homo sapiens

<400> 40

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acgaccgttc tcttggcatc ggatcagcgg caaattgcgc tgggccagtc cttcccggca       180
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gtttgtcgcc tcctccgggg gtctcctccg ggtgcacggc tcagtcctgc agctgcagct      2640
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<210> 41
<211> 2763
<212> DNA
<213> Homo sapiens

<400> 41
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tgacaagtac gcagtttcca ttattttgaa attacagcca gtagagagtg actaatttgt      180
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aaa                                                                    2763
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<210> 42
<211> 1139
<212> DNA

<213> Homo sapiens

<220>
<221> SITE
<222> (915)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1123)
<223> n equals a,t,g, or c

<400> 42
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aatgttgctt actggcacaa cacgcggcgt gttgagttct ggaaccagat gaagctcctt     780
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tggcaagagg ctgagatggg cacagggagc cactgagggt caccctgcct cctccttgc     900
tggcccagct gctgnttatt tatgcttttt ggtctgtttg tttgatcttt tgctttttta     960
aaattgkttt ttgcagttaa gaggcagcty atttgycaaa wtttctgggc tyarcgcttg    1020
ggagggcarg arccctggca ctaatgctgt acaggttttt tyctggtagg agarctkaag    1080
gcasttgcca ctgartctyc tgkccctgar aarggaatat ggnaaggctt gggatgccg     1139
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<210> 43
<211> 2590
<212> DNA
<213> Homo sapiens

<400> 43
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gtctgcagac aagaggaaga gaagatgaag gaagactgtc tgccgagttc tcacgtgccc     180
atcagtgaca gcaagtccat tcagaagtcg gagctcttag gcctgctgaa aacctacaac     240
tgctaccatg agggcaagag cttccagctg agacaccgtg aggaagaagg gactctgatc     300
atcgaggggc tcctcaacat tgcctggggg ctgaggcggc ccatccggct gcagatgcag     360
gatgaccggg agcaggtgca cctcccctcc acctcatgga tgcccagacg gcctagctgc     420
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gcccaggggc caagcattca gccagtgcac aaggctgaga gttccacaga cagctcgggg     600
cccctggagg aggcagagga ggccccccag ctgatgcgga ccaagagcga cgccagttgc     660
atgagccaga ggaggcccaa gtgccgcgcc cccggtgagg cccagcgcat ccggcgacac     720
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gagtctgggg agcggacaaa attaaaagac tgcgagtacc cgctgatttc cagaatcctg     960
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gtcccccatg aagtcgctca gtacattaag tttgaaatgc cggtgctgga cagttttgtt    1080
gaaaaattaa aagaagagga agaaagagaa ataatcaaac tgaccatgaa gttccaagcc    1140
ctgcgtctga cgatgctgca gcgcctggag cagctggtgg aggccaagta actggccaac    1200
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ccggccggtc acattgactg atggccaccg cctgacgaat cgagtgcctg tgtgtctacc    1320
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caggaacttg ctgggtcaga tctgtgtggc cagccctgtc cacaccatgc ctctcctgca    1440
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gtcccagagc ccctgtgggt ccacaagccc ctgtcctctt ccttcatatg agattcttgt    1560
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ctgccctcat atcacgctgc cccacaggaa tgctgctggg aaaagcaggg cctgccagca      1620
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gcagtgctca gccccatcac cactgtcccg tggatgcctg tgtacctctt gccttttctg      1980
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gtgcccatca agagcatagc ttggaagcca ccatgctgtg cggaactgcg tcagggcaaa      2400
tgtcacagca ggatttcccc aacccagctc catcatcaca gacacagaga gctgcagggg      2460
aggcctgccc actgtttgt cgactctgcc ctcctctggc agcatagatc cttaggtgct      2520
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aaaaaaaaaa                                                             2590
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<210> 44
<211> 2634
<212> DNA
<213> Homo sapiens

<400> 44
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gccttaacag atcagggatc aggaacatga ctgcccttgc tcatctgctg gccctccaca        60
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gaagcacatc aggactgttg ggttagatga agtcatgcag gtaaagctgc tgtgcactgc       180
agacatgtca gcatggctgg tcagtctctg tgcttggctg agcctgctca gagccacagt       240
gacctcccag gtgtcctcct cccctgctcc cgtcgtggca tctgggactc tgtcccctg       300
ccaccctcca gggtctcctg ctgcttctgc ctgtttgctc tctcctcagt ctccctgcag       360
aagagcttcc aagtggagga gtcacatgac tggggtggca ccgtccaaca gaggcagtag       420
ctgcgagtcc agtgggtctc agggcaagcc aagtcaaagg ctggggcct aagacaacag       480
ggataggagt caatgcacat ctgtgagatg ctggggaagc agcatcaaca tgacttgggg       540
acccctgggg cccacagctc tctgcatgga aagggaggaa ggagccaagc tggtgagcac       600
ccagccagtg ttttgtggac atgaacagtt ctggttctgg agagggatct tcgttgagct       660
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gcttcatgtg cttgtcttaa gtcgatgggt ctggacaagg gtcttagatg tggcacagtc      1140
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acatcgtggc tgttgatgcc acgtgttgtg aggcctttgt cagctcttct cctgtattcc      1440
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tggccagctg gagacggagg ctggaagta cttgcccggc tcctctctct gtaggtttgg      2160
tcttcggcct tgcagctgcc ctggtgcttg cagattgcgg tttgatggac caggcacttt      2220
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tttgttctat tccagtttcc acgtacatcg ttttggtgac atctctgcgt tatcatttat      2340
ttatatggag tgtattttct ccaaaacttc tctacgaggg aatgcacctg cttattacag      2400
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ctgctgtctg tgtattcttc acggcaatgg atcaaaccag actcacacag tcttagacta      2460
agctgaacac tggaaaaata atacatgctt aaagtctgct gttattctaa aatgaaagat      2520
atgaattcaa caaagttgat ggataacttt ctttgactgc tctacctgaa tttagactaa      2580
gcagtaaata gtttaataaa agatcacttt aatataaaaa aaaaaaaaaa aaaa            2634
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<210> 45
<211> 448
<212> DNA
<213> Homo sapiens

<400> 45
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ccacgcgtcc gtgctggact gcttggtgaa tccacaagta accaggatag tggcacaact        60
tttgatacaa ggaagaagtt tatgattcaa gtggaagatg acttttaaaa taatattttt       120
taaatatata tttttaagta gtatgactaa aataaagatg aaccagcaaa aggtcagttt       180
gcacatttgt aaatgtattt atccttaccg aattacatgt cagtctgttg ccaccttctt       240
tcatgcacat tcctctttgg ccaaactggc tgctctttgt ttgtaagctt ttgttcctct       300
ctcatcccat acttttagcc tgtgtcaaat gtaagtccca agtatttcca gcaggaagta       360
atgtcttcct cagcctcaac cagggaccaa ccggctgctt acttttgcaa ataaaatttt       420
actagaacac gaaaaaaaaa aaaaaagg                                          448
```

<210> 46
<211> 3037
<212> DNA
<213> Homo sapiens

<400> 46
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aattcggcag agcctaggag gagaaagttc catcatgtcg gagatcagag gaaaacccat        60
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tctgaggttc tgcaaacagg ccaccctgca gttctgtgtg gtgaagccac tcatggcggt       180
cagcactgtg gtcctccagg ccttcggcaa gtaccgggat ggggactttg acgtcaccag       240
tggctacctc tacgtgacca tcatctacaa catctccgtc agcctggccc tctacgccct       300
cttcctcttc tacttcgcca cccgggagct gctcagcccc tacagccccg tcctcaagtt       360
cttcatggtc aagtccgtca tctttctttc cttctggcaa ggcatgctcc tggccatcct       420
ggagaagtgt ggggccatcc ccaaaatcca ctcggcccgc gtgtcggtgg cgagggcac        480
cgtggctgcc ggctaccagg acttcatcat ctgtgtggag atgttctttg cagccctggc       540
cctgcggcam gccttcamct acaaggtcta tgctgacaag aggctggacg cacaaggccg       600
ctgtgccccc atgaagagca tctccagcag cctcaaggag accatgaacc cgcacgacat       660
cgtgcaggac gccatccaca acttctcacc tgcctaccag cagtacacgc agcagtccac       720
cctggagcct gggcccacct ggcgtggtgg cgcccacggc ctctcccgct cccacagcct       780
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gcgggctgca gtggcggaag tgctggcgcc atagccacgg tcaggctgtg ccccacctcc       900
agcctcacca ccaggccagg aggcagctgg cacagtgctc acgccgcctt tatttattgg       960
accagaaaca ctcacatgtc gcttccagag gaacggggga cagccaggct cgcccatggg      1020
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cctgggtatc cccacctgtc gtggccacac ctctgcctgc ctcatgcccc ttcccccctgg     1560
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tggggctctt agttcagctg ctggcactcg caggatcctg cagtgctggg cccagagccc      2040
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cctgccggtg ttcactgggg attctttctt ttggtccttc ctggaatgaa caggttccct     2340
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cttgtctttt ttttttttaaa ttttctttcc aggtagagta gctctttgta cataaagaat    2820
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tgtatgactg ccatgagttc caccagaaag ccactctatt ttggtctctg tgacatttta    2940
aatgcgtgac agaagtgagc aaataaagtg aggaagaaat ctaaaaaaaa aaaaaaaaa     3000
aaaaaaaaaa aaaaaaaaaa aaaaaaaggg cggccgc                              3037
```


<210> 47
<211> 419
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<400> 47
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tttagtcagt ctagccaaag gtttgtcaat tttattcatc tactcagaga accatctctt     120
ggttttgttc attttccttta tatttaagga aacaaccaga ccagcagctt tctgtgtctc     180
cgtggagtcc tgctatggtt ctgggagttg cctctcctct ctttctgtcg agtggcccgg     240
ccagtgcatg tggcggctcc tgcgtctccc cttcaccaga gtagctcgtc ctttacctgt     300
ttggcatttc catgtaacat ttcttttgaa aagttggttt actgctaaag tactggcttt     360
catacagtga aaccccacag aacaaaactg gagctgcata caaaaaaaaa aaaaaaaaa     419
```


<210> 48
<211> 940
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (726)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (727)
<223> n equals a,t,g, or c

<400> 48
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ggcacgagga gtaatgaggc tgaggaccag acaaaagagc agaaggcaga ggaaagaaaa     60
aatgagcagg agaaagagca agaggaaaat gaagagaaag aggaggagaa gacagagagc     120
caggggtcaa agccagccta tgagactcag cttccatccc ttccctacct tagtgttctt     180
tcaggtgctg acccagagct gggttctcag ctccaggagg cagctgcttg tggtgagagc     240
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ccacacctca gtctaacttc agttcccatc cttcatccca ggcactaact atattgaagc     360
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gttgcaacgg gagcagctta gtccacccca ggtgcagcct ggcttctgtc tgtatctcag     600
caccaccctc tccctctgtg ccatggaaaa aggtgaggcc cagagggcaa attgccagca     660
cagttgtgtg gacacactag gccctcagca ccagccctaa gagggcttca ctcaacctgg     720
cccagnncag gcacaggtct atagcaggga gccatactcc ctgtctactc taccccctgg     780
ctctgccaag gggaagaggt taagcatctc ccatgttacc ccaagtgcta ggttgtgaac     840
tgctaaaggg gctgaatgtg ttggatctgg gcctgaacat ggaaatactg gaagaacaga     900
```

```
tgctgcatga aatcttgtgc agagagtatc ctgaactcga                                    940
```

<210> 49
<211> 760
<212> DNA
<213> Homo sapiens

<400> 49
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gggacttcaa gaccagcctg ggcaacatag aaggacctgt ctctatggaa ggaaaaaaaa            60
aaaaaaaaaa aggctggtca tgcatctgtg gtcccagcta cttgggaggc tgtggcagga           120
ggattgcttg agcccaggag gtcaaggctg cagtgaacca tattaacacc actgccctgc           180
cctccagcct ggaacacaca cacacacaca cacacacaca cacacacaca cacgaagagg           240
catgtgcctt gttcagatat acataaagct cacccatcgc caaattccct gcctgtgcct           300
gctgggrcca gactccgctg tcatgagggt gacatycgcc acctgkgctc ttctgctggc           360
tckgatctgc agcgtccagc tgggggatgc ctgcctggat atcgataaac tgcttgcgaa           420
tgttgtgttt gatgtgtccc aagacctyct gaaggaggag cttgctcgtt acaaccccag           480
tcccctgaca gaggagtcct tcctcaatgt ccagcaatgc tttgccaatg tctccgtgac           540
agaaagattt gctcattcag ttgttattaa gaagatcctt cagagcaacg attgcataga          600
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ggctccccgc gttcctggcc tggctctgtt catcactaca gagaccccaa tgaacacctg           720
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<210> 50
<211> 2479
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (240)
<223> n equals a,t,g, or c

<400> 50
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ctcatgtggg gctgtagaag gtgcactcaa tttactagat agaggtcaaa ggatgtactt           180
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cttccgtttc tataaaatag ggataacgct tccttccagg gaggtttga aagtgggatg            300
agggatctaa gatgcctagg acacatgagt gcttaagcca tgttagtgtc ttctcctttc           360
tcttcacctg tttctttctg ggctgttttt gtttgtttgc ttttactttta taaaataaga          420
acagtgaact acctattatg cagatctcct gcctttcata gtgctttata aactgtgaag           480
cagaaagcag aatgtgtggt tgtttgggca ccaggaggac aaaggtcccc aggctttgaa           540
tttctctgac ctctctaaat tgtgtttgaa ttccagagaa gagctctgtt tttctaggtg           600
agaattaggc aagcttttcc tggagctcac cccagtcagc accctgaggg ctgagggctg           660
agggctgagg gcttcccttc cacaagacct ccctgtcttt gtgaggctca gcatcacaaa           720
gccacctggg gagtcaaggg tmrgtattgt tcttcagaga cacctggatg ctggctcact           780
ccctgaggag gagggaaagc tgctctggcc tttgaaacat tgtattgaaa actcacacac           840
agaagccaaa amtgacaagg atgataagct gctaatatgc taataataat aataatgagc           900
tatgcctgtt cttcacatac tgtgctctga gagaggttaa aatgcctta ggccagtact            960
ttgattttttt ttttttttt tgagatgaag tctcaaaaaa gctccgtcgc ccaggctgga         1020
gtgcagtggc atgatttcgg ctcgctgcaa cctccgcctc ccgggttcag gcgattctcc         1080
cacgtcagcc tcccgagtgg ccgggactgc aggcacacgc caccatgcct ggctaatttt         1140
ttgtattttt ggtggagatg gggtttcacc atgttggcca ggctggtctc caactcctga         1200
cctcaggtga tgcacctgcc tcggccttcc aaagtgctgg gattacaggc acaagccaca         1260
gtgcccggct aggtagaagt ttagaagagt tcattaagac tctgccactc ggtggatttg         1320
taacatgtat taaacattaa ccctctctgg gcctgagttt ctctatctta agatgaggaa         1380
aattggtgaa ataataccta acacacttcc tagctctaac taactttgct aggccagatg         1440
cttacaaatt gaaattcttt gatgtcaacc ctgtcttatt ccttggacaa aggggaagag         1500
aagaaaggtc ttagttttta caacgcaacc agcatgtatc aggcattata tgagggactt         1560
tatgtacact aatgtataca ctgatttcta gcacagcatt gctttgttaa tttgmcaaat         1620
gatcttctaa arggtgggc acgtgtgcca agggtactwt cacaaggttc tctaatttta          1680
atcttatcaa ggaaacaagt awtcaaaaga cagaaatggg aggcagaatt agtacataat         1740
tttaaatttg cattggtgtg atactatact agacactgga aataaggtaa tcacagttaa         1800
cctactaaac agatatttta cttgatagca atagagaata cataatatgt ctaaatcaag         1860
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tatcctgtat aaatcacagg tgagctattt ctcaacacat tatttgtttc cttccttctc          1920
tacttaaaaa aattatacac ataattcata aatcattctc attataaaag ggtcaacaac          1980
atagagcaaa gacttagggg tcattctcta ctcagccttc ctttcagccc ccagcccctt          2040
acctcactct ctcaccaccc aatcccctta acagagaacc acaatgatgt atattccaag          2100
tcactttcaa gttaaatttc attattggta tccttacatt ttcctttaag aaaaaagaaa          2160
ctctgggccg ggtgcagtgc tcacgcctgt gatcccaaca ctttgggagg ccgaggaggc          2220
tggatcacga ggtcaggaga ttgagaccat cctggccaac atggtgaagc cccatctcta          2280
ctaaaaatac aaaaattagc tgggcgtggt ggtgcgcact gtagtcccag ctactcggga          2340
ggctgacaca ggagaattgc ttgggcccgg gaggcggagg ttgcagtgag ccgagatctc          2400
gacactgcac tccatcctgg caacagagcg agctccgtct caaaaaaaaa aaaaaaaaaa          2460
aaaactcgag cggcacgag                                                       2479


<210> 51
<211> 1573
<212> DNA
<213> Homo sapiens

<400> 51
agctcctgcc tcggcttccc aaagtgctgg gattacaggc aagagccacg gcacccggcc           60
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accctgtctc gctgtcgctc tcagcgttta tatttggctc agagccacat ctgccaaact          180
tctgcccgat ttgaatgaaa gtgctgaaat tataggcccc tcggctgctg aaaaaaagtg          240
agaacatcat gtaaaccgta atttactggg attgccaact acaagctgta attaagccct          300
tattgtgtta aagctttgga aaaatccaag ccaataatga gatatttata gggcattagc          360
tacaatctga ataaagggaa aatgtggccc tgcgtctgaa gcaggactgc aaagagagga          420
aagacgcctg cttccgggtg cgttttgggt ttctgtgaat attggtaact aggtccctgc          480
tgggtggtgg gaaattttcc cctgtggcgt cacccgtagc ttgaaccggg agctggatga          540
ctgtttcagt ttcatctgct gctggacatt tatgatgtta agagccagtg tttatggaga          600
atccgtgt gccacatgtg caagatctga ccagtgtctt ctctgcccag gggtggcagc          660
tgctgctctt agcatccctg ctttataggt agagaaactg aggccagaga gggagactgg          720
cctgaagtca cacagggagg aggacagagg agttggagct tgaactggat gtgggccctc          780
tagagccaca catatggcgg ctttgggtgg gaaggtgtgg gcctgactct tgagagcagg          840
gctgaatggt gggcaccatg gcgtttgtat ctgaggactg ggccaagatt acagagggag          900
tgagcaacgc gtggctttgg atatgcatcg aggttgtcag ctctgtgtcc agcctgcgtg          960
tggtaagcag caaccactct acaccagttg ctgggcaccc agcagggact gggacagaca         1020
ggacaggtga acagttaaat gagcaagaac attctggggc aggcacaggg gctcacacct         1080
gtaatctcag cactttgaga ggccgaggcg ggcagatcac ttgaagccag gtgttcgaga         1140
ccagcctggc cagcatggcg agcccgtct ctgccaaaaa tacaaaaatt agctgagcat         1200
ggtggtactt gtctgtcgtc ccagctactt agcaggctaa ggtgggagga tctcctgagc         1260
ccaggagttc gaggttgcat tgagctgtga ttgcaccact gcgctccagc ctgggtgaca         1320
gcaagacccg gtctcaaaaa aaaaaaaagg ctgtatgcgg tggttcacgc ctgtaatccc         1380
agcactttgg gaggctgagg tgggagttcg agaccagcct ggccagcatg gcgaaacccc         1440
atctctacta aaaatatagg caggagaatg gcgtgaaccc gggaggcgga gcttgcagtg         1500
agccgagatc gcgccactgc actccagcct gggcgacaga gcgagactcc gtctcaaaaa         1560
aaaaaaaaaa aaa                                                            1573


<210> 52
<211> 1677
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (537)
<223> n equals a,t,g, or c

<400> 52
ccccccgggt cgacccacgc gtccggactt ttttttatttt agctattcca gggggtttga           60
agtagtactg cattgtgatt ttaatttgca tttccctgat gattaatagt gataagcata          120
ttttcatata atatttacca tttatttatc ttcttgtttg aaatatctgt tcaagtctta          180
tgcccatttt aatgggacag ttttctgtt tattattgat tcatattatt gacttatagt          240
aatattttat gaattgatct ctttattatt atgaaatgyt tcttttttatt tgtggtaata          300
ctcatcatca tgaaatctaa tttgtctgat attattatag ccacttatac ttactgtata          360
cctgattatt ttttccatac ctttatcttc aatttatctg tatatttgaa ttcaaagttc          420
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atctcttgag cctgaaagta ataagcacct tgaacccgga tctttatatc taaatatgat    480
tctccagtaa aatttatcag ggttctctgg acaagtggct gattgattgt agagcangga    540
taagaagagt atatgctgaa cctgaatcat ttttgtggtg ccaaaagtaa ggaagtacac    600
aaaaaaattg agaagatatc awgaaatgca caaaaactaa cctgaagtga ctctyaatga    660
ccatatctkg gacaatttga gtaaaaaaat aagtaacaat aatggatgat atcttataag    720
ataatataaa acaaatatca atgagtctat gatgatatag aattagaatg tataaatggg    780
aggaaggggga aaattctttg cttaagcaga ataataatta attaatataa aaagaataat    840
ggaaatggta gaaatagaaa gtcaacattt ggcaagcacc acagtaataa ttgttgcagg    900
caagaatcat caatggatgc taaagtttgt gagaaaaagt ttgatgagaa atgggctatt    960
tacataacct caaaggcttt tcccacaaga tactgttaat tacaaagggg aaaatattga   1020
gaaacatgga agacagcacc ttaaccaaat gattgaagtt aataccatta gtaatgcaac   1080
aaatcagtat cgtgtgcctc ctgatatgat gcactgagaa gggcacaagc atcacctta    1140
tggtattctt gcaaaaaatg cataatctaa attcaaccat gaagaaatat tagaaggatg   1200
ttctatgact agtcagtact gctcaaaaat gtcaagatta tgaaagacaa agaaagacta   1260
aggtactttc cagatttaaa gaaattaaat agacaggact actaaatgca atatatgagt   1320
ctgaattgga ccctggacta aaattaggca gacagttggt gaattttgag tcaagtctgt   1380
agagtagtta atagtatttc tggttttgat catcataata tggttattta agatgttaac   1440
atttggtgga tctgggtgaa aagtatatga ggattctctc gcagtatttt tgcaattttt   1500
ttaaatctga aattctttta aaatgagaag ttggctgggc acagtggctc acacctgtaa   1560
tcccagcact ttgaaacacc aaggcaggag actcgcttga gcccaggagt ttgagaccat   1620
cctgcgtaag atggcaagac tccatctctt taaaaaaaaa aaaaaaggg cggccgc        1677
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<210> 53
<211> 1892
<212> DNA
<213> Homo sapiens

<400> 53
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ggcacgagag aaggtgttta agaagaagcc agcagataaa tgaagaacaa tcacttgttt     60
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tttttcagca cgtgaggctg tctgggtcat ctgttttttt gctcgtgatt actcacctaa    180
gtactatagg taagttgggc ggaaatcctt gctgttatgt ttaatgtccc ttgccatttt    240
cactgcatta gtgttccctc cttgctattt ggatgtaaat attcaccatt ttcactttcc    300
ctgctgactt tctcatctgt ctctgacaaa attcatatac atctttacca ggaaagcata    360
ttttatctaa ataatagctt tagtcacaaa ggtgtgtttt tttgatagat aatctgagag    420
aaatgagtgg aactcttgat gttttccaag gaactgattt ggtaaatcag atttactata    480
ttatgatcta tttttctaaa aatccgacaa gaactaagaa gcaagaaaat gcactccagc    540
ctggccaaca gagtgagact ccgtctcaaa aaaaaaaaaa aaaaaaaacc ggatgtctag    600
gccaatgata attattttg atgcagtgtg gattagttct tttgttaacc ccactgtctt    660
ggggaatgat gccagctggg aaattgagtt tttgactgaa acatggagcc ttcactgctt    720
ttttctggt tcctatgaag atttggaaca tagaaaacac aaaaactcac cttaaaattt    780
gagcaggtcg ttgatggcaa aaataatttt aaggaaaaag gaatattctt atgtagttat    840
tctaaagttt aaggagcgtt gttgaccata atattgctta gttttcttac tgctgttaag    900
taagtaaatt gtttcaaagt aggttttgtg tgtgtgtgcc tagtgtaaaa gaactgaaat    960
tttgatgctt acagcacttg gctcgtgcat ttgtatcaaa atttgcctgc ctctttatga   1020
gggaggcctg cttttcacac ctcagtttat ttaatacgag gcaagttgta agacaacact   1080
cattctaggt gattctgtgg tgccatgaaa tttaaggtaa tttgggggaaa aggattagtc   1140
agttttaagc aagagtcaca tcttttgagc tttcgattat cagtgtagta cctgactaaa   1200
aatgaagtaa tacccttaaa ccatttatga tttctagtat ttctctgaaa gatcgttttg   1260
gggacaaaag tgacttgaca tgtccaattt catttcagaa taaaaagcta gcatctttaa   1320
aaatctcaga ttgcttgctt acagatacaa gtaagaatta tggacaaacg attcctttta   1380
gaggattact tttttcaatt tcggttttag taatctaggc tttgcctgta aagaatacaa   1440
cgatggattt taaatactgt ttgtggaatg tgtttaaagg attgattcta gaacctttgt   1500
atatttgata gtatttctaa ctttcatttc tttactgttt gcagttaatg ttcatgttct   1560
gctatgcaat cgtttatatg cacgtttctt taatttttt agattttcct ggatgtatag   1620
tttaaacaac aaaaagtcta tttaaaactg tagcagtagt ttacagttct agcaaagagg   1680
aaagttgtgg ggttaaactt tgtattttct ttcttataga ggcttctaaa aaggtatttt   1740
tatatgttct tttaacaaa tattgtgtac aacctttaaa acatcaatgt ttggatcaaa   1800
acaagaccca gcttattttc tgcttgctgt aaattaagca aacatgctat aataaaaaca   1860
aaatgaagga aataaaaaaa aaaaaaaaaa aa                                  1892
```

<210> 54
<211> 1646
<212> DNA

<213> Homo sapiens

<220>
<221> SITE
<222> (1544)
<223> n equals a,t,g, or c

<400> 54
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aattcggcac gagtctaagt gagcatttgg tatgattttg ggattattga atttgctgag        60
gattgttgtg tttctgattg cgtggtcaat tttagagtat gtgacacatg gtgatgagaa       120
agatatatat actatgttgg tttcagatga agagtttcat atatgtttat tagaatgatt       180
tggtcaagtg ttgagtttag gttctgatat ctgctaattt tctgcctcaa ggtgggaaat       240
taaagaaaat aaaattaaat taaaaagaga aagaaacaag gtttcctgta ttaggctgac       300
ttatcctaga ggcagtaaca ggcacagccc acatccagga aaagttttga taacactact       360
taagaagcca gggctggaaa gaatgtgctc tggagactct cccagcattc cctcaacata       420
gggagaagag aaacaaattt tcctttctct tatgattcct gtttttcatt taagcagcac       480
attgaaggtc atgagatgcc tgagcaggcc tggattgcag ccacctaggc accatagtga       540
aggttataag ataagcccat gcaaggcact agagcaagcc taggtaacag ccatctgggc       600
cacatagtaa gagtcatatg taagtctgag ttataaacct gtcatagtat gattaactgc       660
ttttgttctg tttctgtatc cttgctttca catcactaca ctttgtgcca ctgtaggctt       720
gtttcaagtt agcccaccct ctttagaagt gtatgtaaaa gttaaatgct gtctttgtcc       780
ttggcccagt ctctggatgt taatccactg ggtctgagtg cactcaataa aatcctcctt       840
ttctacctat cggtctttcc agtctcctaa ttcccacaac acagtgatct aagtgtctgc       900
ggagtgttgt agtctcctat tattgtgtca gaatctacat ctctttatag gtcttctaag       960
aacttgctgt attcatgtgc acccatgaat tttttttttt tttttgagac agtttcactt      1020
tgttgcccgg gctggagtgc agtggcatga actcagctca ctgcaacctc ctgggttcaa      1080
gcaattctcg tgcctcagcc tactgagtaa ctgggattac aggcacctgc caccatgttt      1140
ggctggtttt tgtttgtatt ttagtagaga tgaagtttca ccatcttggc caggctggtc      1200
tcaaactcct gagctcaggc agtccacctg cctcagcctc ccaaagtgct aggattacag      1260
gcatgagcca ctgtgcccag ccaacaccca tggatttttt tagaacacct ttttctcttc      1320
tgctttttcc ttcataaaca ttctttcaag tgtacacagg gtgcccaagg ctacacctta      1380
gatacctgaa tccagtgtct cctaaaattc agatgtccaa gggttcaggg acatgtccag      1440
agacttggtt gttgtaggag aaaatataaa ttagaaataa gaggctttat tctcctacct      1500
gaaaataatg gaagatattt tgttcttttt tcttaaagca tttngattat atgtagatat      1560
ttttctctga tttttggaaa tatatgtaaa tcatagtaac agctaaataa accatttgtc      1620
atttttttta aaaaaaaaa aaaaaa                                             1646
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<210> 55
<211> 1558
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1443)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1460)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1494)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1537)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1543)

<223> n equals a,t,g, or c

<400> 55
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gggtcgaccc acgcgtccgg attttttatct gccttttttt gtctggcagt caaactttca        60
cagtccctgt taactcctgt ttcttcttaa ctttatttcc tagcagtaac tctgtgcata       120
atccatattg ttcagagttt cactaagtaa gatgtaatac agcccactgc tgatttactg       180
atgaaagaaa atcacttata agatgaaccc tgctgtaaga cagagatgtc tcttgttttg       240
ttttcagcag aagctgatcc tgtctcattt tttcctgcta caggttcctc agtggtgtgc       300
tgaatattgt ctttccatcc actaccagca cgggggcgtr atatgcacac aggtccacaa       360
gcagactgtg gtccagctcg ccctgcgggt ggcggatgaa atggatgtta acattggtca       420
tgargttggc tacrtgatcc ctttcgagaa ctgctgtacc aacgaaacaa tcctgaggta       480
ttgtactgat gatatgctgc aaagagaaat gatgtccaat ccttttttgg gtagctatgg       540
ggtcatcatc ttagatgata ttcatgaaag aagcattgca actgatgtgt tacttggact       600
tcttaaagat gttttactag caagaccaga actgaagctc ataattaact cctcacctca       660
cctgatcagc aaactcaatt cttattatgg raacgtgcct gtcatrgaag tgaaaaataa       720
acaccctgtg gaggttgtgt accttagtga ggctcaaaag gattctttg agtctatttt        780
acgccttatc tttgaaattc accactcggg tgagaaaggt gacattgtag tctttctggc       840
ctgtgaacaa gatattgaga aagtctgtga aactgtctat caaggatcta acctaaaccc       900
agatcttgga gaactggtgg ttgttccttt gtatccaaaa gagaaatgtt cattgttcaa       960
gccactcgat gaaacagaaa aaagatgcca agtttatcaa agaagagtgg tgttaactac      1020
tagctctgga gagttttttga tctggagcaa ctcagtcaga tttgttatcg atgtgggtgt      1080
ggaaagaaga aaggtgtaca acccgagaat aagagcaaac tcgctcgtca tgcagcccat      1140
cagccagagc caggcagaga tacgcaagca gattcttggc tcatcttctt caggaaaatt      1200
tttctgcctg tacactgaag aatttgcctc caaagacatg acgccactga gccagcaga      1260
aatgcaggaa gccaacctaa caagcatggt gctttttatg aagaggatag acattgcggg      1320
cctaggccac tgtgacttca tgaacagacc aggtagcctt atgctcccat gtcagccagg      1380
cattaggctg agattcacct tctcctgccc attctctgtc ctgagttcac attgatggcg      1440
canaattgca cacaagcatn ggaggggggc ttggttttgg acttaaggct tttnctgcta      1500
gagcacccgg aaagttttga tgccggcttt gggaggnttt ggnttttttg gccgcatt        1558
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<210> 56
<211> 753
<212> DNA
<213> Homo sapiens

<400> 56
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ggcacgagat tttgcagcct gctgtgatgc tcagattcct aggcaaccaa atgtatgcac        60
tttatacctg gcttctgcta caaagccctg tctgtccttg tgtccttgtg acctcagccc       120
ttctctaccc ttctctctta accctgaggc ccagccaggc ccacgcagcc tgcatctatc       180
tgccttctgt ttctctggtc tctctctctg atcctttcta gcctctctca agctgaggca       240
aacccagccc taagcctctt cactctaata ttctgctcta gagagtggaa gctcaggaag       300
aagcctaaaa actaatttaa agaaaagcaa aacttatact cttcccacca aagcttccac       360
ccttcagtct acgtagatca ttgttctgta tccccttgat ctatatcctt ggttgaggaa       420
tggaagttct gtggccagca gatagggatt ccagagctgt tcagcttcat tattgaaagg       480
gaggcacatt catggcttac ctcaagatag tggggaagc aagagcacaa gaaattgaag        540
agggaaatta gggtgcctaa tgtttaaact gtcacaacag ttagataatg ttgacttccg       600
ctgttttctc tctggaccac agaattgttt gttaaatgga agcagtgcag tcaaacgttt       660
tcaaaagaat tgagttcact ctaaaaagta ctgttttttcc ccactttctc ctgctattcc      720
tcagtcactg gcactaaaaa aaaaaaaaaa aaa                                     753
```

<210> 57
<211> 1769
<212> DNA
<213> Homo sapiens

<400> 57
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agaaaaattg cagggaccca ccccagactt gtgagtgcga gtgaagcagg agcagccctg        60
gccatcactg tttctttgac gtgtacatcc catcctgaga tgcagctggg ctgggagccg       120
ccacctgggt ggatctgatt cctggatttc cccatcctgg ggasaggtga cccatcctgt       180
tctcctcctt aggtccatgt gaaatctgar gtccttgctg tcaagttgtc acaagaaata       240
aactacgcaa agagcctcta ctatgaacag cagcttatgt taagactcag cgaaaaccga       300
gagcagctgg agctggactc ctgaagcccc gctgctgaga tgggcgctcc cgacacagcg       360
cagacccacc aggaggaaag aggcccagct ctcagctgac gatggaggca gaaccggagt       420
cgggtttggg gaagttgtca aggaatgagg gaaagtaaat cctcatgagg aaaagtacaa       480
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atggaaatcg tattaatttg tgaggcaggg agttatttta gattatggga aataattttt    540
aaaggtattg gttaaataac gtttaaaaac atgtactgag atgaatctaa tttttagatt    600
gccctgtatt ttgttaacat gtatatatgt acaacagtgt gtttgtaaat atataggaac    660
gtttctgaac agggtctgtg ctatgtgtaa aggtttgtta actgtaaagt aaatataaagt    720
tatattggat cttctattgc actaattcta gatgtctaat tcaggatact gtctatagaa    780
aggcattctt aaaagttaaa gaatgttacg tcttagtttt ggagactaaa gtattcccag    840
taaagtgggt tgaggtgagg gctgtggtcc tgaaagggac gcctttgaca tcgtggctgt    900
ccagttgggc tgtgagctgt ggcacccagg actggcgctg gcccttcaga aggatctagg    960
agaggggctt gggagcccac ttttaatttc tcaccccat tttacaaaga gtgcttagat   1020
tcttacaaat tatgatgtaa gttatccatt tggcttttc ctaactagtc ttaccaaact   1080
taggggggaaa cctgtgctcc attaccacat gggtgcaagt cagcattgta agttttctca   1140
ggttattatt attagagagg ttggaaacat tggtaaactc tgttgattga gaaggaaaaa   1200
aaaagtccca ttgaactgtt gcaacaaatc agaaatccac ataaaagtgc tctcctgcct   1260
gggcagcaac aaccaagaac aaagcccgg gactgttttc tttttaataa agccacaggc   1320
aggcatcgta gctccacagc ccgaggggac acaggatgga aaccccagga tgagaaggga   1380
gcagggagag ttccagaaag ggggatgaaa taggagtatt aaaaagctgc gttggtaagt   1440
ttttcatgga accaagattt gacaaaggca tctcttatcc ttggtttaa attcctgctg   1500
ggagcaaggc ctggtatgag cgccctgggt cttgtttttg gtgtttcgct tttctgtaag   1560
gattaagcag atagggagaa gggaaaaggg gcctcacttt agaatgaatg agtcaccttg   1620
tgatttttaa attttattt taataaagct aatcaatttc taaaaaaaaa aaaaaaaaaa   1680
aaaaaaaggg cggccgctct agaggatccc tcgaggggcc caagcttacc gtgcatgcga   1740
cggtatagct ctctcctata gtgagccta                                    1769
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<210> 58
<211> 626
<212> DNA
<213> Homo sapiens

<400> 58
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ggagagaccc cttcagagca gggattgtgc cgggagagtg cctctgactt tgggacattt    120
catccacaga aatttccaag ccaatggttt cttttgggtt ttggtttta tgtttgtttt    180
ttgggggtttg gaaaaacatg cattttacc gtgcacgtaa attggtcagc agaaaaggga    240
gcccagaaaa ggcagcagat ggaccatgcc cttgctgggt tttccttttc tttgggactg    300
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ttggggggaca gaggaacctg gggagtccat cgcatgtcct acaatctgct cttagacacg    420
gccttgccag gagagcctgc cctcagactg caggaccaga acccctgcct ccatctttcc    480
aagcaccggg gcgaaaacc acaaaggaaa ggaagaaatt tatatatata taatataaaa    540
tcacttggtg attaaaaaaa taactgctcc ataaataaaa ctcctaaagt cacttatgtt    600
taaaaaaaaa aaaaaaaaaa aaaagg                                        626
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<210> 59
<211> 634
<212> DNA
<213> Homo sapiens

<400> 59
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ggcacgagct cgtgccgccc ccttactttt cagcaagcca ggggcccagc agtcagctcc     60
caggatgtgt ggggagctgt ccctgactct gcaggcctga gcgagtgtgt gagcatgcgg    120
ggacatgggt gtgtatggca cacataggtg cgtgtgtgtc ttttgtattt tttctcctcc    180
aaggagctgt gtcagtgtgg acgttctgtt tcagggagtt ggaaaggagg gtgtctgcag    240
aaggtggaga gcaggggcag aggccccact ggccacccc tgcttcccag agtgaaacct    300
tgtgcctggt gaccaaagtc cctccaaagt gctcttcctt ctgggttatt caagccaaat    360
atctgggttt cccctctcc tcattcccta gcaaccccca attatctttc aagataggag    420
atatttccca tcccccttcct ttgtaaatat ctcatctccc actggagagc ccaggagcct    480
attcctggca tggatgtatt gtacactgac gcgtccccac tcctgtacag ctgctttgtt    540
tctttgcaat gcattgtatg gcctttataaa tgataaagtt aaagaaaaaa aaaaaaaaaa    600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa                               634
```

<210> 60
<211> 627
<212> DNA
<213> Homo sapiens

```
<400> 60
ggcacgagga attttctttg aagtattta aaagtaagcg ctttactgtg tgagccctgg          60
ctcttggcca gtcctatgaa tgggccttag atgatgcccc tgaaattgca tgcaaaatgt         120
ctttatttgc tcaaatgtgt attttttgtg ggggtggggg gaatgacctt ttatcagatt         180
ctcacagggt tcaagatcca aaaaagttta gatctagtgg gttaggtgtg gatttctctg         240
aaataggcca gggaaaaggc tgtgacctct ccttgggtct gctgcagcgt tctagccttg         300
gctaggtgag gggaactgtt gggccgatgc tgtgtggctg gagcagaacc cacagtgctg         360
tccatagagg agaacaagca acgaagatca tggctaaaga tcttagagat ccttaaaatg         420
ccgattccta atctcttgct gaaaactact gactttaga tattttcccg cttgccactc          480
tgtaatccag aatattagga acaagttctt aaactcgagt ttacttttca ctggtgtttg         540
catgtgtggg ggacaaaagt ttatgttctt gtggcaggaa actgtgggat ctgcagcatg         600
gaggagttta aaaaaaaaa aaaaaaa                                               627


<210> 61
<211> 632
<212> DNA
<213> Homo sapiens

<400> 61
aattcccggg tcgacccacg cgtccgcgac ggtctcatgt accagaaatt ccggaaccaa          60
ttcctctcct tttccatgta ccagagcttc gtgcagtttc tccagtacta ctaccagagc         120
ggctgcctct accgcctgcg ggcgctgggc gagcggcaca ccatggacct cactgtggag         180
ggcttccagt cctggatgtg gcggggcctc accttcctgc tgccttttct tttctttgga         240
cacttctggc agctttttaa cgcgctgacg ttgttcaacc tggcccagga ccctcagtgc         300
aaggagtggc aggtgcttat gtgcggcttt cccttcctcc tccttttcct cggcaatttc         360
ttcaccaccc tgagggttgt gcaccacaag tttcacagtc agcggcacgg gagcaagaag         420
gattgaggct gggccttccc ctgccggccc agaggggctt ctgtcctgtg tgttgtggga         480
ggggatggga ggcgcccctc gagtgtgcgt gtatcagggg gtctcttcta ttctcccttg         540
ggttttatgg gcgctgtggg ccctgaagga agacctgggc ccagtgccct caataaagag         600
aggcccagag gtggaaaaaa aaaaaaaaaa aa                                        632


<210> 62
<211> 706
<212> DNA
<213> Homo sapiens

<400> 62
acgcgtccgg tctttgccat ttggggggatg tttgctgtgt gccaggctct gtactaggat         60
ctgtctaaac ttctctcgtg tagttcttaa atgagggagt tgaggcccat tgaaaggtct         120
gtggttccaa cttgaatttt aatgcctttt tgtgggctac acatggcttc acctagcatc         180
attcttctgt taatcttctt cttctttttt ttttttcag tatgttcagt tagccagtat         240
atgtttgaaa atgagtgtga gagcatgagc aggaggaggg gcagagggtt ggggagaagc         300
agactcaaag ttgagcaggg gccagatgca gacctccatc ccaggaccct gggatcatga         360
cctgagccga aggtagatgg ttgactgact gagccaccca ggcgcccct ctcttgttaa          420
tctttgattt ccatcagaaa atgacctgaa acagtacttt tataaaatta aagtgaggga         480
tgcctgggtg gctcagtcgg ttaagcgtct cccttcacct caggtcatga tctagagtcc         540
gaggatcaag cccaagttcc actgtcaggc tctgtgctca gcggagagtc tgcttccctt         600
ctgccactca acctgctggt gtgcatgctc tctctctttc tctcaaataa ataaataaat        660
aagtaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa                         706


<210> 63
<211> 1345
<212> DNA
<213> Homo sapiens

<400> 63
tctacctctt gtcctccccc caacaccacc accaccctgg ctcccctccc tcatgaccgc          60
ctggatcctc ctgcctgtca gcctgtcagc gttctccatc actggcatat ggactgtgta         120
tgccatggct gtgatgaacc accatgtatg ccctgtggag aactggtcct acaacgagtc         180
ctgccctcct gaccctgctg agcaagggg tcccaagacc tgctgcaccc tggacgatgt          240
cccctcatc agtggccctg atctgcctcc tgcgctacgg gcagctcctg gagcagagtc          300
ggcactcttg ggttaacacc acggcactca tcacaggctg caccaacgct gcgggcctct         360
```

```
tggtggttgg caactttcag gtggatcatg ccaggtctct gcactacgtt ggagctggcg      420
tggccttccc tgcggggctg ctctttgttt gcctgcactg tgctctctcc taccaagggg      480
ccaccgcccc gctggacctg gctgtggcct atctgcgaag tgtgctggct gtcatcgcct      540
ttatcaccct ggtcctcagt ggagtcttct ttgtccatga gagttctcag ctgcaacatg      600
gggcagccct gtgtgagtgg gtgtgtgtca tcgatatcct cattttctat ggcaccttca      660
gctacgagtt tggggcagtc tcctcagaca cactggtggc tgcactgcag cctacccctg      720
gccgggcctg caagtcctcc gggagcagca gcacctccac ccacctcaac tgtgcccccg      780
agagcatcgc tatgatctaa ggtctgggga gggtggctgg cccggcctcc acagcacccc      840
accccatatc ttctttccat ttattttgta ccaaaaacaa ttttgagaaa gtattctgtt      900
gggatctggg cttcctcact tctggagaag tggccatccc atgcccacct gtgccatgga      960
ggagtggggcc ctgccagctg ccacagctgc atgacctgct tccccacccc acggtgtcgt     1020
tttgtttttta aaggtcacct gtcctcactc acccagccag cccttcaggt gccttctact     1080
cccagtgcca aagccagacc actggggttt cctgctgcag gaattggggg ctgggaacag     1140
cagaggggat agaagtctgg tggaggtgga gtgggcacgc cttagctacg gaaaggccca     1200
tttctgggcc cactgagctg cactgggatt cttcactctg cccctcactt cctttagggc     1260
aaataacaca gcagaaccac gtgggtattt tagtactttt ttttatatta aaagaattct     1320
aatttgcaaa aaaaaaaaa aaaaa                                            1345
```

<210> 64
<211> 773
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (11)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (51)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (53)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (69)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (112)
<223> n equals a,t,g, or c

<400> 64
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aanccagctt ntggcccatg gtttacgcca aagcttcgaa atttacccct ncncttaagg      60
gaaccaaang ctggactcca accgcggtgg ccggccgctc tagaactagt gnatcccccg     120
gggctgcagg aattcggcac gagcaacata gtgagccttg tctctacaaa aaattttaaa     180
ggttagcgag gcatggtggc gcgcgcctgt gatctcagct gcttggggagg ctgaagtggg     240
aggatcccct gagcccagga gtttgaggct gcagtgatca tgccattctg ggcaacagag     300
tgaaaccgtc tcagaaaaga aaatgaaaat acctctacat gtggtcttcc tgctaatctc     360
tctgaccttc ctattcacca ccctccccac tgcccactct gctccatcct caccagcctc     420
cttgcacatt ctcagattga ggggggcatct catgtgtgtc ttccctttga aaatgatgcc     480
aacactcatt tgacgtacac gtgcaaatgt tttgttgtg gaactatcct tctattcttg     540
ttttatgaaa cattgccatc ggggatagat atattacttt taaaaattgt attttagagc     600
cctgtgtggg gctcatgcct gtaatcccag cactttggga agctgaggtg ggtggatcac     660
```

```
ttgaggttag gagttcgaga acagctagac caacatggtg aaaccccatc tctactaaaa     720
atacagaaat tagccaggtg tggtggcacg tgcctgtaat cacagctact cga           773
```

<210> 65
<211> 1569
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (282)
<223> n equals a,t,g, or c

<400> 65
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gcccacgcgt ccgcttcctc caaggctccc ccagatttac cagtgacgcc cttccctaag      60
tatcaactta gccgtacttt gaactctggc ccctcaggtt tcaaggggac ggccttgtct     120
gggatcagct ctgtctgggg aaagaagctg caccagcctc tgaatagcag gctgagtcac     180
ttgtttcttg tgccttgagt cagttctctc atcagctctc ctcctaagcc agtgttatta     240
cctccagtaa agatggaaaa gttggggttc agagaaggct anaaacagac agcctgctgt     300
gtcctgtctt ttctcctggc acgagcaggt tcaccaattt ttaaaatcca aatatatctc     360
atggtacagt ggaagaactg gccagagagt ctggaagttt gggttctggt cctggctgtg     420
ccactgactc actgtgacct tgggatcttg tgctgtgaag acatttccca agtgcttcat     480
gttagccagc aaatctgacc cacaaggcct ggaaagaggt gattgttagg ttgcgcagag     540
gtggtcttat ccagctcagc ttcccctggg acccaccgtg ggacctgagg cagaactggg     600
gtggacttgg cctcctccat ggcacaccgg ctgcagatac gactgctgac gtgggatgtg     660
aaggacacgc tgctcaggct ccgccacccc ttaggggagg cctatgccac caaggcccgg     720
gcccatgggc tggaggtgga gccctcagcc ctggaacaag gcttcaggca ggcatacagg     780
gctcagagcc acagcttccc caactacggc ctgagccacg gcctaacctc ccgccagtgg     840
tggctggatg tggtcctgca gaccttccac ctggcgggtg tccaggatgc tcaggctgta     900
gcccccatcg ctgaacagct ttataaagac ttcagccacc cctgcacctg gcaaggtgtt     960
ggatggggct gaggacaccc tgagggagtg ccgcacacgg ggtctgagac tggcagtgat    1020
ctccaacttt gaccgacggc tagagggcat cctggggggc cttggcctgc gtgaacactt    1080
cgactttgtg ctgacctccg aggctgctgg ctggcccaag ccggaccccc gcattttcca    1140
ggaggccttg cggcttgctc atatggaacc agtagtggca gcccatgttg gggataatta    1200
cctctgcgat taccaggggc ctcgggctgt gggcatgcac agcttcctgg tggttggccc    1260
acaggcactg gaccccgtgg tcagggattc tgtacctaaa gaacacatcc tcccctctct    1320
ggcccatctc ctgcctgccc ttgactgcct agagggctca actccagggc tttgaggcca    1380
gtgagggaag tggctgggcc ctaggccatg gagaaaacct taaacaaacc ctggagacag    1440
ggagcccctt ctttctccac agctctggac ctttcccccct ctccctgcgg cctttgtcac    1500
ctactgtgat aataaagcag tgagtgctga gctctcaccc ttcccccact aaaaaaaaaa    1560
aaaaaaaaa                                                            1569
```

<210> 66
<211> 2657
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (179)
<223> n equals a,t,g, or c

<400> 66
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aatatctcat gaatgagttt gaagtttgct tggattttga aatgaatggg actttgtctt      60
tattactaat tcaccaaatt tgttgagcgc aaaagcaatt aatgtagttt aagtatttag     120
tatgtacagt tctctgtgtt aacagctgag aagtaagcaa ccttttctga ctgcatatng     180
gtgtattcct cttttgagtc cccataatat tttataaatt gtaatgcccc atcttgtact     240
acagttgtct tattcgtatt gtttataaac tttgagggtt aggactgggt cttactcatc     300
tttatgtgcc ttccttatgc ttcaaagaat ttaccatcta atggaagaga acatttgcaa     360
gttggctcca taccaagctc cttccacata ctctactcat ctgaactttg aatgcagaat     420
ctttaaattg caaccccaca tactaaggtc aagaaagaac ttaatgggaa ttaatctcca     480
cccattagct ttaccctgac atcaggattg ccaaatccaa tggactcttg tctattctta     540
cgtgacttct gctggaaaat gcgaatgttg accatcctgc cacttggaac tctcttccca     600
ctcctcacat tgctttgct accactggaa gttccttctg tttcttgtgg agtacctttt     660
```

```
gctgtctggg acttgtagat aatggtgttt cctagggctc cctccagggc cctctgcctc      720
actaactgga tatactttc ctgagcaaat cccaggaaac ttgcgtcaga ccgtgacttc      780
aaatacaggt tgataaatgc taaactgtct ccaaaccaga cttcatccta gcctccacac      840
ccagacaccc aactgctatg gatcaacttt ttagaatatc ctcacttcaa actgaccta      900
cctaaaataa tgactttttc ccccaataat tgcccctgct atattcctta tttctgaatg      960
gtacctccta gctatataga ttatctgagg agcttactga aatgctgatt ctgaagataa     1020
ggggcatggc tttaagattc tgtatttctg gcgagtaccc aactggtgct catgctgctg     1080
attgagaacc acttctgaat atagcaaggc tgtaaattat ccactacgtg ccctcgtaat     1140
tgtcttagtt caagcccaga ttattgtagt agacttagta tttctttgcc ttagttgatc     1200
tgtgacccct ccaatatcta ttccacactg ttgcctaagt ggccttagta aaattcaagt     1260
ctggttattt tattcccctg cttggaattt ctcaatgtag aatgaaactc attcagcatt     1320
aacacatagg cccttcttga tctgacatcg tgtttctcta gttagactaa agaatcccca     1380
ctatgaagtt gtttcatccg taagtacctt tgaacccaga agcccccttt ctcatatgtt     1440
tctcattcct gtttgcccctt cagagttcag ctttagttgc taaaacattc agacatccct     1500
ctgacttaga tcccccacta ctgttttct gtgagaagca gctatgcata attcctcttc     1560
aacacagtag ttcttgaaat tttgcaggcc tctcctggaa aggaggaaat gacttctctg     1620
actttgtatg atgcttattt gtggatgaat gggcaaggga aaaatgaag gaacaagtga     1680
atgaacagta tgggagtatg agaaaaggta taaattgggt atagttgaga aaaggattca     1740
aattgatctt tggttcgaga gacaatttca tctttctgat gaatttaaag tgtagtcttt     1800
gaaccagctg ggcttaatta tgtaaagttt tgagcctgag ataagcacac aatcacaaaa     1860
cctacccaaa caagtttttt gtttcacttc atctcttata aaacaatgtt ctaaagtaag     1920
tgatagggat gctcatcatt ctgctaccta ttatcacaat gaaaacaatc ataaatagta     1980
cacaggaaag gtgagaaata gcggatagtt cttatttcat agtactgtat atggaaataa     2040
accaaatttg ctcatagaga tactatttta ttacctcaaa aatatataaa aatgaaaacg     2100
ttatgaaaat attttaaaat gggatttaaa aataattgag aacatcacag caatttagaa     2160
tactaaagag catagcttta aaatgatagt gctgagaact ccccacctct accccaccac     2220
ctgtaggctt ctttgacaac ttacaaatgt tctctagttt gtatctagaa tcacttatat     2280
ctttcaaata aaccaacttt gtgaamaaaa aaaaaaaaa aaagggcgg ccgctctaga     2340
ggatccaagc ttacgtacgc gtgcatgcga cgtcatagct cttctatagt gtcacctaaa     2400
ttcaattcac tggccgtcgt tttacaacgt cgtgactggg aaaaccctgg cgttacccaa     2460
cttaatcgcc ttgcagcaca tccccctttc gccagctggc gtaatagcga agaggcccgc     2520
accgatcgcc cttcccaaca gttgcgcagc ctgaatggcg aatgggacgc gccctgtagc     2580
ggcgcattaa gcgcggcggk tgtggtggtt acscgcagcg tgaccgttac acttgccagt     2640
ggccctagcg gccgct                                                     2657
```

<210> 67
<211> 1355
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1327)
<223> n equals a,t,g, or c

<400> 67
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gccctgctg gatggcactg tgggtaacct gcatcctttc actgtgcaca tggttctcat      60
gcctttacgg agcagactcc ttggcaaata aatgcctcag tgcaggagcc acacgcaagg      120
catttcctt ctgtgtcctc tttcgtgatc ttgaggtggg acttgggttt gaaggctttg      180
tcactcacct ggcatgcaaa ctctttttgtt attgtgaact ctctgacagt gctttaagtc      240
tggggcacga ataaataatt ttccacacag ctcacaactg tagggcttac atccagtgtg      300
tgtgcgttat gtctgtgtgt gtatccttat tttttgaga cggagtctcc ctctgtcacc      360
caggctggag tgcagtggcg cgatctcggc tcactgcaac ctccgcctcc tgggttcaaa      420
cgattctcct gcctcagcct cccgagtagc tgggattaca ggcacccacc amcacgcctg      480
gctaattttt gtattttag tagagatggg gtttctccat gttggtcagg ctggtctcga      540
tttcctgacc ttgtgatccg cctgcctcgg cctcccaaag tgctgtgatt ataggtgtga      600
cacaccacac ccggtcctgt gtatgttttg agacggagtc tcactctgtc acccaggctg      660
aagtgcagtg gcaggatctc ttctcactgc aacctccacc tcctgggctc aagtgattct      720
cctgcctcag cctcccaagt agctggtatt tcagacttgc accatgatgc ctggctactt      780
tttatatttt tagtagagac ggagtttcac cagcctggtc tcgaactcct gacctcaagt      840
gatccaccca ccttggcctc ccaaagtact gggattacag acatgagcca tcacgcccgg      900
cccctaagtg gattttagg cattctttca ggtgggcctc tgtggtgaaa ccttttgtgc      960
acatttcaca aacggcttct ccgctgtgtg gcatttctca gctttctcca ctgccttcac     1020
aggaaacttc ttcccgcact cctggccgac gtcgctccct aggtgactgt gcggcaaaag     1080
ctcagacctc aggacactgg tggctgttgt ccagcctagt gtctgcttac cccgcactca     1140
```

```
tcccgtagtc acacgtgaag gcttgagggg tctggaactt cctggccgta gcaatggact    1200
ttctgaactt tcttgctctt tcagaattgc gttttgaccc tgagtgtggt cgtgggtgac    1260
tcgccggcct cccgccccgg ggtgtggtgc ctttgttctg agtcatcaca agtgccatca    1320
tcctgancct agcwtctttc agatcaccct ctcga                                1355
```

```
<210> 68
<211> 945
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (927)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (929)
<223> n equals a,t,g, or c

<400> 68
tgtggaattg tgagcggata acaatttcac acaggaaaca gctatgacca tgattacgcc      60
aagststamt acgggaacct ctactatagg kaaagctggt acgcctgcag gtaccggtcc     120
ggaattcccg ggtcgaccca cgcgtccgaa aaaatattct tatccaagct cattgtctgt     180
tttctcagta cctggttacc atttgtacta cttcaggtaa tcattgtttt mcttaaagtt     240
cagattccag catatattga gatgaatatt ccctggttat actttgtcaa tagttttctc     300
attgctacag tgtattggtt taattgtcac aagcttaatt taaaagacat tggattacct     360
ttggatccat ttgtcaactg gaagtgctgc ttcattccac ttacaattcc taatcttgag     420
caaattgaaa agcctatatc aataatgatt tgttaatatt attaattaaa agttacagct     480
gtcataagat cataattta tgaacagaaa gaactcagga catattaaaa aataaactga     540
actaaaacaa cttttgcccc ctgactgata gcatttcaga atgtgtcttt tgaagggcta     600
tgataccagt tattaaatag tgttttattt taaaamcaaa ataattccaa gaagttttta     660
tagttattca gggacactat attacaaata ttactttgtt attaacacaa aaagtgataa     720
gagttaacat ttggctatac tgatgtttgt gttactcaaa aaaaactact ggatgcaaac     780
tgttatgtaa atctgagatt tcactgacaa ctttaagata tcaacctaaa catttttatt     840
aaatgttcaa atgaaagcaa aaaaaaaaa aaaaaaaaa aagggcggcc gctctagagg       900
atccaagctt acgtacgcgt gcatgcnana acataactcg aagtt                     945
```

```
<210> 69
<211> 1799
<212> DNA
<213> Homo sapiens

<400> 69
acccacgcgt ccgtaaaatc tttcgctcat tttataatca agtagtttat ttttgttgtt      60
gtatatattc caggtactag atccctatca gatttgttaa tattttcttc cattctgcag     120
gttgtctttt cattttcctg ataatgtcat ttgatgcaga aaagttttta attttgaagt     180
tcattttaca gtttttttctt ttgttgtatg tgctttttttt ggtgttatat ctgagaatct   240
gttgtcatac ccaaggtcat gaagatttac ctgtatgtta tcttctaaga gtttttatgat    300
ttcagctctt atgtaggttg tttgtcgatt ttaagtttat ttttgtataa ggtacgagga     360
ggaaggggtc cagcctcatt tttctgcatg tggatcccca gttgtcttag caccatttgt     420
tgaatagtct gttctttccg cattgagtgg tcttcatgtg cagactgtta ttgctgtgca     480
tgtgtatatc tgtttatctg gaattcactt ttaagaactg tatatgggcc aggtgcagtg     540
actcacatct gcaatcccag cgctttggga ggctgaggtg ggaagatcac ttggggtcag     600
gagtttgaga tgagcctgta caacatagca agaccttgtc tcttcaaaaa aaatttttaaa    660
aactagctga gtgtggtagt acctgcctgt agtcctacct actcaggagg ctgaggcaga     720
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gagtttaatt gagcagtgaa caattcgcga gtcgggcagc cccaagaatc acgggagatt     1740
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<210> 70
<211> 1984
<212> DNA
<213> Homo sapiens

<400> 70

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caatggcaaa aagatcatct tctttgtctt cctcaaagag actggtcttt ttcacagcct     180
tggcctcctg gctctggagg gtcccagaat ccctgggttc tcctttagac ctgctgtcag     240
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<210> 71
<211> 2084
<212> DNA
<213> Homo sapiens

<400> 71

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gtagagttct gtgagagtga tgaaggagag gcatggtcct tagctagaga cagaggcgga     180
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40

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<210> 72
<211> 734
<212> DNA
<213> Homo sapiens

<400> 72
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cagctgccca tttttcttcct aggttaggtt atatcttcat aatcacaaga attagtgatg      360
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aaaaaaaaaa aaaa                                                          734
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<210> 73
<211> 1538
<212> DNA
<213> Homo sapiens

<400> 73
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gcgcgaccct ggccctccgg gaccctccgc tgactccacc gcgcacttcc cgggacccccc      180
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<210> 74
<211> 3227
<212> DNA
<213> Homo sapiens

<400> 74

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<210> 75
<211> 1654
<212> DNA
<213> Homo sapiens

<400> 75
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<210> 76
<211> 1763
<212> DNA
<213> Homo sapiens

<400> 76
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46

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taggaagcag cacagccgtg tccttaggga tgttcgcgtc cagtaaagac actggtaact   2100
gcggtttcag ccaacactct tcatggcagt gtcgacctcg ggttagcttc tgttgtcttt   2160

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gcrtctttcc acagcaaggg ccaaaccctc ctggttccct tcagagtctt tttggcctga      2340
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taaaactagg gactttcaag attaaaaaaa agattgtcac tactaatttg acgcctaact      2460
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cctctgggga attaacatct aaattctggt aactattaaa agacagatct ggttaattta      2580
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<210> 81
<211> 2636
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (632)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (887)
<223> n equals a,t,g, or c

<400> 81
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gtcgcattgc tctcggccgc actcgcgctg tacgggccgc cactggacgc agtttttagaa      180
agagcgtttt cgctacgtaa agcacattcg ataaaggata tggaaaatac tttgcagctg      240
gtgagaaata tcatacctcc tctgtcttcc acaaagcaca aagggcaaga tggaagaata       300
ggcgtagttg gaggctgtca ggagtacact ggagccccat attttgcaga atctcagctc       360
tcaaagtggg cgcagacttg tcccacgtgt tctgtgccag tgcggccgca cctgtgatta       420
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aggtggagaa gtggctgccc cggctgcatg ctcttgtcgt aggacctggc ttgggtagag       540
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<210> 82
<211> 1320
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (831)
<223> n equals a,t,g, or c

<400> 82
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tgtttctcgg tggctggtgt gtttgaggat ggcgcgtgca tgcgttttcc agctttcttt     180
gtggaggaag ttacctgtgg gtattaacct gtccccagcc atcctctcac tgagcttggg     240
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acagcgcagg cagacatgac ctcctgggct tctgcgggtg ccaacactgc cgctccttct     360
ggaggctcag ggaggctctt gagggcattg ggacatcgts ctgccggccg ccgggcagag     420
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tggcctgccc actgcagtac agtcacgtgt cacataacat tctgtctacc gtggaccaca     540
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ccttctggat ttgtgtcagt camtgtggag ttcgcacaat gacagaytca cctgggaggc     780
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aggagaatcg cttgaacctg ggaggcagag gttgcagtga atcgagatca tggcactgcc    1260
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```

<210> 83
<211> 634
<212> DNA
<213> Homo sapiens

<400> 83
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gtcgttgagt ccgatccact ggtactcccg gtaccggttg ttgatgaagt cctgttcctc     180
gggtgtgctg atgctggcca gatgcgcgcc gtacatccgg cactgggtct ctgcctcctc     240
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```

<210> 84
<211> 655
<212> DNA
<213> Homo sapiens

<400> 84

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gaggtgcttt ggtaacgtgg ccaccacccc agcctaccgg gctctcacgt ctgcgttgtc       600
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```

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<210> 85
<211> 2410
<212> DNA
<213> Homo sapiens

<400> 85
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  cgtgaggaag aagggactct gatcatcgag gggctcctca acattgcctg ggggctgagg       180
  cggcccatcc ggctgcagat gcaggatgac cgggagcagg tgcacctccc ctccacctca       240
  tggatgccca gacggcctag ctgccctctg ggctgctggt ctcttctcct tggcctgagc       300
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  aaaaaaaaaa                                                            2410
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<210> 86
<211> 2921
<212> DNA
<213> Homo sapiens
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<400> 86
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<210> 87
<211> 1259
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (18)

<223> n equals a,t,g, or c

<400> 87

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<210> 88
<211> 931
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (717)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (718)
<223> n equals a,t,g, or c

<400> 88

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caaagccagc ctatgagact cagcttccat cccttcccta ccttagtgtt ctttcaggtg     180
ctgacccaga gctgggttct cagctccagg aggcagctgc ttgtggtgag agctggtccc     240
cacccaccct ggcccctttt tgacttgccc cattctgtga ccccacaggc ctcccacacc     300
tcagtctaac ttcagttccc atccttcatc ccaggcacta actatattga agcgtcttgt     360
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ggggatatgg gtgctggcat tgtgggtagg gtgcctttgc ttcctctaca ggcctgcctg     480
tggtactgac caatgtggag cttggtctaa ggtgcgaaga actgcaatgg ctgyctgcaac    540
gggagcagct kagtccaccc cargtgcarc ctggcttctg tctgtatctc acaccaccct     600
ytycctctgk gccatggaaa aaggtgaggc ccagagggca aattgccagc acagttgtgt     660
ggacacacta ggccctcagc accagcccta agagggcttc actcaacctg cccagnnca      720
ggcacaggtc tatagcaggg agccatactc cctgtctact ctacccctg gctctgccaa      780
ggggaagagg ttaagcatct cccatgttac cccaagtgct aggttgtgaa ctgctaaagg     840
ggctgaatgt gttggatctg ggcctgaaca tggaaatact ggaagaacag atgctgcatg     900
aaatcttgtg cagagagtat cctgaactcg a                                    931
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<210> 89
<211> 1420
<212> DNA
<213> Homo sapiens

<400> 89

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aggtgcagct gagggatgga dacagcaact gtgagtggag cgtgttatat gttatcattg        180
ctacctttgt cattgttgtt gccttgggaa tcctgtcttg gactgtgatc tgttgttgta        240
agaggcaaaa aggaaaaccc aagaggaaaa gcaagtacaa gatcctggat gccacggatc        300
aggaaagcct ggagctgaag ccaacctccc gagcaggtaa agaaaagaga atgtcactga        360
gtggcctgaa ccaaagctca tggatactgg agatgaagaa ccagcaggag accccaggca        420
tcaaacagaa aggccttttg ctaagtagca gcctgatgca ctccgagtca gagctggaca        480
gcgatgatgc catctttaca tggccagacc gagagaaggg caaactcctg catggtcaga        540
atggctctgt acccaacggc agacccctct gaaggccagg agcccgcggg aggagatcct        600
gtagccacct ggtctgtctc ctcagggcag ggcccagcac actgcccggc cagtcctcct        660
acctccccgag tctgcgggca gctgctgtcc cagcatctgc tggtcatttc gccctgacag        720
tcccaaccag aacccctggg acttgaatcc agagacgtcc tccaggaacc cctcaacgaa        780
gctgtgaatg aagaggtttc ctctttaaac ctgtctggtg ggcccccaga tatcctcacc        840
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ctctggggta gagtacgccc tctcgctggg caaagaggaa gtggcacccc tcccctcacc       1080
acagatgctg agatggtagc atagaaatga tggccgggcg cggtggctca cgcctgtaat       1140
cccagcactt tgggaggccg aggcgggcgg atcatgaggt caggagatca agaccaccct       1200
ggctaacacg gtgaaacccc atctctacta aaaatttaaaa aaaaattag ccgggtttgg       1260
tggcgtatgc ctgtaatccc agctactcgg gaggctgagg caggagaatt gcttaaacct       1320
gggaggtgga ggctgcagtg agccaagatc gtgccactgc actccagcct gagtgacaga       1380
gcaagactcc gtcaaaaaaa aaaaaaaaa aaaactcgag                              1420
```

<210> 90
<211> 1183
<212> DNA
<213> Homo sapiens

<400> 90
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ttcagagttt cactaagtaa gatgtaatac agcccactgc tgatttactg atgaaagaaa        180
atcacttata agatgaaccc tgctgtaaga cagagatgtc tcttgttttg ttttcagcag        240
aagctgatcc tgtctcattt tttcctgcta caggttcctc agtggtgtgc tgaatattgt        300
ctttccatcc actaccagca cgggggcgtg atatgcacac aggtccacaa gcagactgtg        360
gtccagctcg ccctgcgggt ggcggatgaa atggatgtta acattggtca tgaggttggc        420
tacgtgatcc ctttcgagaa ctgctgtacc aacgaaacaa tcctgaggtt ggtttgtggg        480
gttcagtccg ctccctgctg atgattcttg gcttaggttc tacaattctg aaggagcatt        540
attctggcat tctacctgtt aagcatctat gctgtgcagt agcaactggt ctctgtcatc        600
agccagccag caacagttgc tttcccacac tggcatcatc tgggattcct tgtctaaatg        660
tatcccatga ctcccattat cccctggaaa aagttaacaa cttgcttggc ccctcagaac        720
cttcaagcgt gtgcttctgg agctatgcct catgcagggt ccacatcatt gcctgtgtgc        780
aagccacatg dacacctgga gcacactgtg tgccctgtgc tttccacacc ctgtgcctgt        840
acacctgccc ctccctgtgc tcagcatgtc cgggcccggc tagttcctcc tagtcactca        900
gtatgcagtg tagcagccac ctactccagg aaggcttccc tgcccctcca gtaatacaca        960
ttagaaaacc ctctgtgggg cttctggaaa acttggtgtc agcctgcatc atagcagctt       1020
cgacagtgtt tctcaaactg tgctttgcag agtcttctat gttccaagga gacttctctg       1080
tggctaccgc aagttgtggt atctcttctg tgcttagctt cattatgaga tttcctttga       1140
agaaggattt ccaagagctt gaaagaagaa aaaaaaaaa aaa                         1183
```

<210> 91
<211> 1881
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> SITE

```
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (48)
<223> n equals a,t,g, or c

<400> 91
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 cagagggagc agcctatctc ccccaagctg gaggcggcag aggactggcc aagccccaac       180
 ctgcctccca gccaggctcc tccaggcctc tggtttagcg gagccccctg agcccaggcc       240
 tgtgtctagc cccagtggct cactgaactt tcagggcagt caggggggtcc tgcttagaag      300
 ccagtcacca gccctctgcc tgcagccatg gaaggggggtg tgcacgtgcc tctgtgtgtg      360
 tggctgagtg tattctgcgc gtgtgtgtgg agggaggggag ggaggggagc atggtgtctc      420
 ccgctccacc gccctttgtt gagccccatc agctgccccc ttttactttg cattgaacgg       480
 cctgtccaaa gatcctctct ctagggcagc agagagcttt ttgcacttta aaaaaaaaa       540
 raaagaaaga aaggtcggaa tttcttttgg gtcaatattt ttaagtgtgt gaggagatgc       600
 tcagtagcag cagcctatgg caagagctta taaatgattg atgcaaattt gcactctgct       660
 ccccctctgt aaggatactg atagcacaac ctcttccccc caccccgccc cgccttttgg       720
 tcgtccatcc ctgtcccttt ctggccctct tcctgtagcc cagtctcagg ctttcctctt       780
 cctgaagccc tacagagtta gggaatggag cccaggcacc aggggtctaa agtgtgagcc       840
 actgagaaga gagacgccaa ctgcacccctt gccacttcca aagcaataga ggcagagtgg       900
 tcccctcttt gccacctagg ccagttttga ccctggcatt aactggcctt agaagaaact       960
 ggatcctggt aggggggtggc attttgtttg tttcttccaa tctgctgaat cttttgactg      1020
 caccttacaa acagcagtct gctcccatga ccctctgccc acttccattg gtctccaggc      1080
 cccaataatc tggggttgaa actttgagga aatgccagtg acttattcca gagtgcctca      1140
 gttaggggaa cttctctgta aagaaccctg ggtattgagc aaaaacctta ttatcgttaa      1200
 tgacctataa ttggaagctt cctgccttct tctttggttg ctcctgtgga aaatactgaa      1260
 aagattactt tgttttattt tgttgtcttt ttataaaagg ggaggtggag agacccttc       1320
 agagcaggga ttgtgccggg agagtgcctc tgactttggg acatttcatc cacagaaatt      1380
 tccaagccaa tggtttcttt tgggtttttgg tttttatgtt tgtttttttgg ggtttggaaa     1440
 aacatgcatt tttaccgtgc acgtaaattg gtcagcagaa aagggagccc agaaaaggca      1500
 gcagatggac catgcccttg ctgggttttc ctttttctttg ggactgtgag gggaaatggt      1560
 ttttagaggt gagggttggt ccatgtggag gaaagaagtg tctctgttgg gggacagagg      1620
 aacctgggga gtccatcgca tgtcctacaa tctgctctta gacacggcct tgccaggaga      1680
 gcctgccctc agactgcagg accagaaccc ctgcctccat ctttccaagc accggggcga      1740
 aaaaccacaa aggaaaggaa gaaaatttat atatatataa tataaaatca cttggtgatt      1800
 aaaaaataa ctgctccata aataaaactc ctaaagtcac ttatgtttaa aaaaaaaaa       1860
 aaaaaaaaaa agggcggccg c                                               1881


<210> 92
<211> 1433
<212> DNA
<213> Homo sapiens

<400> 92
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 ggtccgggct cctggacttc gcctttcccg agccctggag gtggggagaa aaggttcacc       180
 aatttttaaa atccaaatat atctcatggt acagtggaag aactggccag agagtctgga       240
 agtttgggtt ctggtcctgg ctgtgccact gactcactgt gaccttggga tcttgtgctg       300
 tgaagacatt tcccaagtgc ttcatgttag ccagcaaatc tgacccacaa ggcctggaaa       360
 gaggtgattg ttaggttgcg cagaggtggt cttatccagc tcagcttccc ctgggaccca       420
 ccgtgggacc tgaggcagaa ctgggggtgga cttggcctcc tccatggcac accggctgca       480
 gatacgactg ctgacgtggg atgtgaagga cacgctgctc aggctccgcc accccttagg       540
 ggaggcctat gccaccaagg cccgggccca tgggctggag gtgggaccct cagccctgga       600
 acaaggcttc aggcaggcat acagggctca gagccacagc ttccccaact acggcctgag       660
 ccacggccta acctcccgcc agtggtggct ggatgtggtc ctgcagacct tccacctggc       720
 gggtgtccag gatgctcagg ctgtagcccc catcgctgaa cagctttata aagacttcag       780
 ccacccctgc acctggcagg tgttggatgg ggctgaggac accctgaggg agtgccgcac       840
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 caagccggac ccccgcattt tccaggaggc cttgcggctt gctcatatgg aaccagtagt      1020
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ggcagcccat gttggggata attacctctg cgattaccag gggcctcggg ctgtgggcat    1080
gcacagcttc ctggtggttg gcccacaggc actggacccc gtggtcaggg attctgtacc    1140
taaagaacac atcctcccct ctctggccca tctcctgcct gcccttgact gcctagaggg    1200
ctcaactcca gggctttgag gccagtgagg gaagtggctg gccctaggcc atggagaaaa    1260
ccttaaacaa accctggaga cagggagccc cttctttctc cacagctctg gacctttccc    1320
cctctcctgc ggcctttgtc acctactgtg ataataaagc agtgagtgct gagctctcac    1380
ccttcccca ctaaaaaaaa aaaaaaaaaa actcgagggg gggcccggta ccc            1433
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<210> 93
<211> 2454
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2317)
<223> n equals a,t,g, or c

<400> 93
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agcctacctg gacgtagaca ttactctgtc ctcagaagct ttccataatt acatgaatgc    120
tgccatggtg cacatcaaca gggccctgaa actcattatt cgtctctttc tggtagaaga    180
tctggttgac tccttgaagc tggctgtctt catgtggctg atgacctatg ttggtgctgt    240
ttttaacgga atcacccttc taattcttgc tgaactgctc attttcagtg tcccgattgt    300
ctatgagaag tacaagaccc agattgatca ctatgttggc atcgcccgag atcagaccaa    360
gtcaattgtt gaaaagatcc aagcaaaact ccctggaatc gccaaaaaaa aggcagaata    420
agtacatgga aaccagaaat gcaacagtta ctaaaacacc atttaatagt tataacgtcg    480
ttacttgtac tatgaaggaa aatactcagt gtcagcttga gcctgcattc caagcttttt    540
ttttaatttg gtgttttctc cctttaaccc tcagtatcaa gcacaaaaat    600
tgatggactg ataaaagaac tatcttagaa ctcagaagaa gaaagaatca aattcatagg    660
ataagtcaat accttaatgg tggtagagcc tttacctgta gcttgaaagg ggaaagattg    720
gaggtaagag agaaaatgaa agaacacctc tgggtccttc tgtccagttt tcagcactag    780
tcttactcag ctatccatta tagttttgcc cttaagaagt catgattaac ttatgaaaaa    840
attatttggg gacaggagtg tgataccttc cttggttttt ttttgcagcc ctcaaatcct    900
atcttcctgc cccacaatgt gagcagctac ccctgatact ccttttcttt aatgatttaa    960
ctatcaactt gataaataac ttataggtga tagtgataat tcctgattcc aagaatgcca   1020
tctgataaaa aagaatagaa atggaaagtg ggactgagag ggagtcagca ggcatgctgc   1080
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cgaacttgaa agaaaaatca tctgtgagtt ccttcaggtt ctcactcata gtcatgatcc   1560
ttcagaggga atatgcactg gcgagtttaa agtaagggct atgatatttg atggtcccaa   1620
agtacggcag ctgcaaaaag tagtggaagg aaattgtcta cgtgtcttgg aaaaattagt   1680
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gtggaagtgc cacatccagt tcttttcttt tgttgctgct gtgtttagat aattgaagag   1920
atctttgtgc cacacaggat tttttttttt tttaagaaaa acctatagat gaaaaattac   1980
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acacaaaaaa aaaaaaaaaa agggcggccg ctctagagga tccaagctta cgtacgcgtg   2160
catgcgacgt catagctctt ctatagtgtc acctaaattc aattcactgg ccgtcgtttt   2220
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gcgcagcctg aatggcraat gggacgcgcc ctgtagcggc gcattaagcg cggcggktgt   2400
ggtggttacc cgcagcgtga ccgttacact tgccagtggc cctagcggcc gcct          2454
```

<210> 94
<211> 1775
<212> DNA

<213> Homo sapiens

<220>
<221> SITE
<222> (820)
<223> n equals a,t,g, or c

<400> 94
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agcctcttcc tcaacctccc aggacctatc tggctccagc cctctccacc tccccagtct       180
tctcccccgc ctcagcccca tccgtgtcat acctgccggg gactggttga cagctttaac       240
aagggcctgg agagaaccat ccgggacaac tttggaggtg gaaacactgc ctgggaggaa       300
gagaatttgt ccaaatacaa agacagtgag acccgcctgg tagaggtgct ggagggtgtg       360
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ggaacagaga ggccctgcgg tggctacggg cagtgtgaag gagaagggac acgaggggc       600
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ggctactttg aggcagaacg caacgccagc catctggtat gttcggcttg ttttggcccc       720
tgtgcccgat gctcaggacc tgaggaatca aactgtttgc aatgcaagaa gggctgggcc       780
ctgcatcacc tcaagtgtgt agactgtgcc aaggcctgcn taggctgcat ggggggcaggg       840
ccaggtcgct gtaagaagtg tagccctggc tatcagcagg tgggctccaa gtgtctcgat       900
gtggatgagt gtgagacaga ggtgtgtccg ggagagaaca agcagtgtga aaacaccgag       960
ggcggttatc gctgcatctg tgccgagggc tacaagcaga tggaaggcat ctgtgtgaag      1020
gagcagatcc cagagtcagc aggcttcttc tcagagatga cagaagacga gttggtggtg      1080
ctgcagcaga tgttctttgg catcatcatc tgtgcactgg ccacgctggc tgctaagggc      1140
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gcagcccagg tacccaggcc cgggcagaca aggcccctgg ggtaaaaagt agccctgaag      1440
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ctgtgttcac cacatcccca cacccattg ccacttattt attcatctca ggaaataaag      1680
aaaggtcttg gaaagttaaa aaaaaaaaa aaaaaaaaaa aaaaactcg aggggggggcc      1740
cgtacccaat cgccctatga tgtagtcgta ttaca                              1775
```

<210> 95
<211> 1379
<212> DNA
<213> Homo sapiens

<400> 95
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tgggtaaaga tggcccccatg gcccccgaag gcctagtccc agctgtgctc tggggcctca       120
gcctcttcct caacctccca ggacctatct ggctccagcc ctctccagcc cccagtctt        180
ctcccccgcc tcagcccat ccgtgtcata cctgccgggg actggttgac agctttaaca       240
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agaatttgtc caaatacaaa gacagtgaga cccgcctggt agaggtgctg gagggtgtgt       360
gcagcaagtc agacttcgag tgccaccgcc tgctggagct gagtgaggag ctggtggaga       420
gctggtggtt tcacaagcag caggagccc cggacctctt ccagtggctg tgctcagatt        480
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gaacagagag gccctgcggt ggctacggc agtgtgaagg agaagggaca cgaggggca        600
gcgggcactg tgactgccaa gccggctacg ggggtgaggc ctgtggccag tgtggccttg       660
gctactttga ggcagaacgc aacgccagc atctggtatg ttcggcttgt tttggcccct       720
gtgcccgatg ctcaggacct gaggaatcaa actgtttgca atgcaagaag ggctgggccc       780
tgcatcacct caagtgtgta gacattgatg agtgtggcac agaggaggcc aactgtggag       840
ctgaccaatt ctgcgtgaac actgagggct cctatgagtg ccgagactgt gccaaggcct       900
gcctaggctg catgggggca gggccaggtc gctgtaagaa gtgtagccct ggctatcagc       960
aggtgggctc caagtgtctc gatgtggatg agtgtgagac agaggtgtgt ccgggagaga      1020
acaagcagtg tgaaaacacc gagggcggtt atcgctgcat ctgtgccgag ggctacaagc      1080
agatggaagg catctgtgtg aaggagcaga tcccaggtgc attccccatc ttaactgatt      1140
taaccctga aacaacccga cgctggaagt tgggttctca tccccactct acatatgtaa      1200
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```
aaatgaagat gcagagagat gaagctactt tcccagggct atatggcaag caagtcgcaa      1260
agctgggatc ccaatccaga cagtctgacc gtggaacgag actcatacac gtaataaatg      1320
ctctgccccc aacttgtcca ccacaaaaaa aaaaaaaaaa aaaaaaaaag ggcggccgc       1379
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<210> 96
<211> 700
<212> DNA
<213> Homo sapiens

<400> 96
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cacagaatgc gtattctcgt cactgtcctt tctatgtcag cattcagagt tactggctgt      120
catttttcat ggtgatgatt ttatttgtag ctttcataac ctgttgggaa gaagttacta      180
ctttggtaca ggctatcagg ataacttcct atatgaatga aactatctta tattttcctt      240
tttcatccca ctccagttat actgtgagat ctaaaaaaat attcttatcc aagctcattg      300
tctgttttct cagtacctgg ttaccatttg tactacttca ggtaatcatt gttttactta      360
aagttcagat tccagcatat attgagatga atattccctg gttatacttt gtcaatagtt      420
ttctcattgc tacagtgtat tggtttaatt gtcacaagct taatttaaaa gacattggat      480
tacctttgga tccatttgtc aactggaagt gctgcttcat tccacttaca attcctaatc      540
ttgagcaaat tgaaaagcct atatcaataa tgatttgtta atattattaa ttaaaagtta      600
cagctgtcat aagatcataa ttttatgaac agaaagaact caggacatat taaaaaataa      660
actgaactaa aacaaaaaaa aaaaaaaaaa aaaaaaaaaa                            700
```

<210> 97
<211> 401
<212> PRT
<213> Homo sapiens

<400> 97
```
Met Arg Leu Arg Leu Arg Leu Leu Ala Leu Leu Leu Leu Leu Leu Ala
1               5                   10                  15

Pro Pro Ala Arg Ala Pro Lys Pro Ser Ala Gln Asp Val Ser Leu Gly
            20                  25                  30

Val Asp Trp Leu Thr Arg Tyr Gly Tyr Leu Pro Pro His Pro Ala
            35                  40                  45

Gln Ala Gln Leu Gln Ser Pro Glu Lys Leu Arg Asp Ala Ile Lys Val
        50                  55                  60

Met Gln Arg Phe Ala Gly Leu Pro Glu Thr Gly Arg Met Asp Pro Gly
65                  70                  75                  80

Thr Val Ala Thr Met Arg Lys Pro Arg Cys Ser Leu Pro Asp Val Leu
                85                  90                  95

Gly Val Ala Gly Leu Val Arg Arg Arg Arg Tyr Ala Leu Ser Gly
                100                 105                 110

Ser Val Trp Lys Lys Arg Thr Leu Thr Trp Arg Val Arg Ser Phe Pro
            115                 120                 125

Gln Ser Ser Gln Leu Ser Gln Glu Thr Val Arg Val Leu Met Ser Tyr
        130                 135                 140

Ala Leu Met Ala Trp Gly Met Glu Ser Gly Leu Thr Phe His Glu Val
145                 150                 155                 160

Asp Ser Pro Gln Gly Gln Glu Pro Asp Ile Leu Ile Asp Phe Ala Arg
                165                 170                 175

Ala Phe His Gln Asp Ser Tyr Pro Phe Asp Gly Leu Gly Gly Thr Leu
            180                 185                 190
```

Ala His Ala Phe Phe Pro Gly Glu His Pro Ile Ser Gly Asp Thr His
     195   200   205

Phe Asp Asp Glu Glu Thr Trp Thr Phe Gly Ser Lys Asp Gly Glu Gly
   210   215   220

Thr Asp Leu Phe Ala Val Ala Val His Glu Phe Gly His Ala Leu Gly
225   230   235   240

Leu Gly His Ser Ser Ala Pro Asn Ser Ile Met Arg Pro Phe Tyr Gln
         245   250·   255

Gly Pro Val Gly Asp Pro Asp Lys Tyr Arg Leu Ser Gln Asp Asp Arg
         260   265   270

Asp Gly Leu Gln Gln Leu Tyr Gly Lys Ala Pro Gln Thr Pro Tyr Asp
     275   280   285

Lys Pro Thr Arg Lys Pro Leu Ala Pro Pro Pro Gln Pro Pro Ala Ser
   290   295   300

Pro Thr His Ser Pro Ser Phe Pro Ile Pro Asp Arg Cys Glu Gly Asn
305   310   315   320

Phe Asp Ala Ile Ala Asn Ile Arg Gly Glu Thr Phe Phe Phe Lys Gly
         325   330   335

Pro Trp Phe Trp Arg Leu Gln Pro Ser Gly Gln Leu Val Ser Pro Arg
         340   345   350

Pro Ala Arg Leu His Arg Phe Trp Glu Gly Leu Pro Ala Gln Val Arg
         355   360   365

Val Val Gln Ala Ala Tyr Ala Arg His Arg Asp Gly Arg Ile Leu Leu
   370   375   380

Phe Ser Gly Pro Gln Phe Trp Val Phe Gln Asp Arg Gln Leu Glu Gly
385   390   395   400

Gly

<210> 98
<211> 205
<212> PRT
<213> Homo sapiens

<400> 98
Met Gly Thr Ala Gly Ala· Met Gln Leu Cys Trp Val Ile Leu Gly Phe
  1   5   10   15

Leu Leu Phe Arg Gly His Asn Ser Gln Pro Thr Met Thr Gln Thr Ser
         20   25   30

Ser Ser Gln Gly Gly Leu Gly Gly Leu Ser Leu Thr Thr Glu Pro Val
        35   40   45

Ser Ser Asn Pro Gly Tyr Ile Pro Ser Ser Glu Ala Asn Arg Pro Ser
   50   55   60

His Leu Ser Ser Thr Gly Thr Pro Gly Ala Gly Val Pro Ser Ser Gly
65   70   75   80

Arg Asp Gly Gly Thr Ser Arg Asp Thr Phe Gln Thr Val Pro Pro Asn

```
                85                      90                        95
Ser Thr Thr Met Ser Leu Ser Met Arg Glu Asp Ala Thr Ile Leu Pro
            100                 105             110
Ser Pro Thr Ser Glu Thr Val Leu Thr Val Ala Ala Phe Gly Val Ile
            115             120             125
Ser Phe Ile Val Ile Leu Val Val Val Val Ile Ile Leu Val Gly Val
            130             135             140
Val Ser Leu Arg Phe Lys Cys Arg Lys Ser Lys Glu Ser Glu Asp Pro
145             150             155                     160
Gln Lys Pro Gly Ser Ser Gly Leu Ser Glu Ser Cys Ser Thr Ala Asn
                165             170             175
Gly Glu Lys Asp Ser Ile Thr Leu Ile Ser Met Lys Asn Ile Asn Met
            180             185             190
Asn Asn Gly Lys Gln Ser Leu Ser Ala Glu Lys Val Leu
            195             200             205


<210> 99
<211> 672
<212> PRT
<213> Homo sapiens

<400> 99
Met Cys Ser Arg Val Pro Leu Leu Leu Pro Leu Leu Leu Leu Leu Ala
1               5               10              15
Leu Gly Pro Gly Val Gln Gly Cys Pro Ser Gly Cys Gln Cys Ser Gln
            20              25              30
Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr Val Pro Arg
            35              40              45
Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe Glu Asn Gly Ile
        50              55              60
Thr Met Leu Asp Ala Gly Ser Phe Ala Gly Leu Pro Gly Leu Gln Leu
65              70              75                      80
Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser Leu Pro Ser Gly Val Phe
                85              90              95
Gln Pro Leu Ala Asn Leu Ser Asn Leu Asp Leu Thr Ala Asn Arg Leu
            100             105             110
His Glu Ile Thr Asn Glu Thr Phe Arg Gly Leu Arg Arg Leu Glu Arg
            115             120             125
Leu Tyr Leu Gly Lys Asn Arg Ile Arg His Ile Gln Pro Gly Ala Phe
            130             135             140
Asp Thr Leu Asp Arg Leu Leu Glu Leu Lys Leu Gln Asp Asn Glu Leu
145             150             155                     160
Arg Ala Leu Pro Pro Leu Arg Leu Pro Arg Leu Leu Leu Leu Asp Leu
                165             170             175
Ser His Asn Ser Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala
            180             185             190
```

```
Asn Val Glu Ala Leu Arg Leu Ala Gly Leu Gly Leu Gln Gln Leu Asp
        195             200             205

Glu Gly Leu Phe Ser Arg Leu Arg Asn Leu His Asp Leu Asp Val Ser
    210             215             220

Asp Asn Gln Leu Glu Arg Val Pro Pro Val Ile Arg Gly Leu Arg Gly
225             230             235             240

Leu Thr Arg Leu Arg Leu Ala Gly Asn Thr Arg Ile Ala Gln Leu Arg
            245             250             255

Pro Glu Asp Leu Ala Gly Leu Ala Ala Leu Gln Glu Leu Asp Val Ser
            260             265             270

Asn Leu Ser Leu Gln Ala Leu Pro Gly Asp Leu Ser Gly Leu Phe Pro
        275             280             285

Arg Leu Arg Leu Leu Ala Ala Ala Arg Asn Pro Phe Asn Cys Val Cys
    290             295             300

Pro Leu Ser Trp Phe Gly Pro Trp Val Arg Glu Ser His Val Thr Leu
305             310             315             320

Ala Ser Pro Glu Glu Thr Arg Cys His Phe Pro Pro Lys Asn Ala Gly
            325             330             335

Arg Leu Leu Leu Glu Leu Asp Tyr Ala Asp Phe Gly Cys Pro Ala Thr
        340             345             350

Thr Thr Thr Ala Thr Val Pro Thr Thr Arg Pro Val Val Arg Glu Pro
        355             360             365

Thr Ala Leu Ser Ser Ser Leu Ala Pro Thr Trp Leu Ser Pro Thr Ala
    370             375             380

Pro Ala Thr Glu Ala Pro Ser Pro Pro Ser Thr Ala Pro Pro Thr Val
385             390             395             400

Gly Pro Val Pro Gln Pro Gln Asp Cys Pro Pro Ser Thr Cys Leu Asn
            405             410             415

Gly Gly Thr Cys His Leu Gly Thr Arg His His Leu Ala Cys Leu Cys
            420             425             430

Pro Glu Gly Phe Thr Gly Leu Tyr Cys Glu Ser Gln Met Gly Gln Gly
    435             440             445

Thr Arg Pro Ser Pro Thr Pro Val Thr Pro Arg Pro Pro Arg Ser Leu
    450             455             460

Thr Leu Gly Ile Glu Pro Val Ser Pro Thr Ser Leu Arg Val Gly Leu
465             470             475             480

Gln Arg Tyr Leu Gln Gly Ser Ser Val Gln Leu Arg Ser Leu Arg Leu
            485             490             495

Thr Tyr Arg Asn Leu Ser Gly Pro Asp Lys Arg Leu Val Thr Leu Arg
            500             505             510

Leu Pro Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu Arg Pro Asn
        515             520             525

Ala Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro Gly Arg Val Pro
    530             535             540
```

```
Glu Gly Glu Glu Ala Cys Gly Glu Ala His Thr Pro Pro Ala Val His
545             550             555             560

Ser Asn His Ala Pro Val Thr Gln Ala Arg Glu Gly Asn Leu Pro Leu
            565             570             575

Leu Ile Ala Pro Ala Leu Ala Ala Val Leu Leu Ala Ala Leu Ala Ala
            580             585             590

Val Gly Ala Ala Tyr Cys Val Arg Arg Gly Arg Ala Met Ala Ala Ala
        595             600             605

Ala Gln Asp Lys Gly Gln Val Gly Pro Gly Ala Gly Pro Leu Glu Leu
        610             615             620

Glu Gly Val Lys Val Pro Leu Glu Pro Gly Pro Lys Ala Thr Glu Ala
625             630             635             640

Val Glu Arg Pro Cys Pro Ala Gly Leu Ser Val Lys Cys His Ser Trp
            645             650             655

Ala Ser Lys Ala Trp Pro Gln Ser Pro Leu His Ala Lys Pro Tyr Ile
            660             665             670
```

```
<210> 100
<211> 386
<212> PRT
<213> Homo sapiens

<400> 100
Met Lys Phe Gln Gly Pro Leu Ala Cys Leu Leu Leu Ala Leu Cys Leu
1               5               10              15

Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser Thr Gly
            20              25              30

Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp Ala Leu Ser
        35              40              45

Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly Gly Ala Ala Gly
    50              55              60

Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr Arg Glu Ala Val Gly
65              70              75              80

Thr Gly Val Arg Gln Val Pro Gly Phe Gly Ala Ala Asp Ala Leu Gly
            85              90              95

Asn Arg Val Gly Glu Ala Ala His Ala Leu Gly Asn Thr Gly His Glu
            100             105             110

Ile Gly Arg Gln Ala Glu Asp Val Ile Arg His Gly Ala Asp Ala Val
        115             120             125

Arg Gly Ser Trp Gln Gly Val Pro Gly His Asn Gly Ala Trp Glu Thr
    130             135             140

Ser Gly Gly His Gly Ile Phe Gly Ser Gln Gly Gly Leu Gly Gly Gln
145             150             155             160

Gly Gln Gly Asn Pro Gly Gly Leu Gly Thr Pro Trp Val His Gly Tyr
            165             170             175
```

Pro Gly Asn Ser Ala Gly Ser Phe Gly Met Asn Pro Gln Gly Ala Pro
             180   185   190

Trp Gly Gln Gly Gly Asn Gly Gly Pro Pro Asn Phe Gly Thr Asn Thr
     195   200   205

Gln Gly Ala Val Ala Gln Pro Gly Tyr Gly Ser Val Arg Ala Ser Asn
   210   215   220

Gln Asn Glu Gly Cys Thr Asn Pro Pro Pro Ser Gly Ser Gly Gly Gly
225   230   235   240

Ser Ser Asn Ser Gly Gly Gly Ser Gly Ser Gln Ser Gly Ser Ser Gly
         245   250   255

Ser Gly Ser Asn Gly Asp Asn Asn Asn Gly Ser Ser Ser Gly Gly Ser
         260   265   270

Ser Ser Gly Ser Ser Ser Gly Gly Ser Ser Gly Gly Ser Ser Gly Gly
       275   280   285

Ser Ser Gly Asn Ser Gly Gly Ser Arg Gly Asp Ser Gly Ser Glu Ser
       290   295   300

Ser Trp Gly Ser Ser Thr Gly Ser Ser Ser Gly Asn His Gly Gly Ser
305   310   315   320

Gly Gly Gly Asn Gly His Lys Pro Gly Cys Glu Lys Pro Gly Asn Glu
         325   330   335

Ala Arg Gly Ser Gly Glu Ser Gly Ile Gln Asn Ser Glu Thr Ser Pro
         340   345   350

Gly Met Phe Asn Phe Asp Thr Phe Trp Lys Asn Phe Lys Ser Lys Leu
       355   360   365

Gly Phe Ile Asn Trp Asp Ala Ile Asn Lys Asp Gln Arg Ser Ser Arg
   370   375   380

Ile Pro
385

<210> 101
<211> 743
<212> PRT
<213> Homo sapiens

<400> 101
Met Asn Val Ser Trp Ile Ser Leu Arg Arg Arg Ser Phe Arg Ala Phe
  1   5   10   15

Gly Arg Val Trp Thr Cys Ser Gly Leu Leu Gln Met Thr Ser Ile Lys
         20   25   30

Gly Lys Leu Ser Leu Val Trp Gln Arg Leu Asp Gly His Phe Cys Arg
       35   40   45

Thr Leu Glu Glu Ser Val Tyr Ser Ile Ala Ile Ser Leu Ala Gln Arg
     50   55   60

Tyr Ser Val Ser Arg Trp Glu Val Phe Met Thr His Leu Glu Phe Leu
65   70   75   80

Phe Thr Asp Ser Gly Leu Ser Thr Leu Glu Ile Glu Asn Arg Ala Gln

```
                    85                      90                      95

Asp Leu His Leu Phe Glu Thr Leu Lys Thr Asp Pro Glu Ala Phe His
            100             105             110

Gln His Met Val Lys Tyr Ile Tyr Pro Thr Ile Gly Gly Phe Asp His
        115             120             125

Glu Arg Leu Gln Tyr Tyr Phe Thr Leu Leu Glu Asn Cys Gly Cys Ala
    130             135             140

Asp Leu Gly Asn Cys Ala Ile Lys Pro Glu Thr His Ile Arg Leu Leu
145             150             155             160

Lys Lys Phe Lys Val Val Ala Ser Gly Leu Asn Tyr Lys Lys Leu Thr
                165             170             175

Asp Glu Asn Met Ser Pro Leu Glu Ala Leu Glu Pro Val Leu Ser Ser
            180             185             190

Gln Asn Ile Leu Ser Ile Ser Lys Leu Val Pro Lys Ile Pro Glu Lys
        195             200             205

Asp Gly Gln Met Leu Ser Pro Ser Ser Leu Tyr Thr Ile Trp Leu Gln
    210             215             220

Lys Leu Phe Trp Thr Gly Asp Pro His Leu Ile Lys Gln Val Pro Gly
225             230             235             240

Ser Ser Pro Glu Trp Leu His Ala Tyr Asp Val Cys Met Lys Tyr Phe
                245             250             255

Asp Arg Leu His Pro Gly Asp Leu Ile Thr Val Val Asp Ala Val Thr
            260             265             270

Phe Ser Pro Lys Ala Val Thr Lys Leu Ser Val Glu Ala Arg Lys Glu
        275             280             285

Met Thr Arg Lys Ala Ile Lys Thr Val Lys His Phe Ile Glu Lys Pro
    290             295             300

Arg Lys Arg Asn Ser Glu Asp Glu Ala Gln Glu Ala Lys Asp Ser Lys
305             310             315             320

Val Thr Tyr Ala Asp Thr Leu Asn His Leu Glu Lys Ser Leu Ala His
            325             330             335

Leu Glu Thr Leu Ser His Ser Phe Ile Leu Ser Leu Lys Asn Ser Glu
            340             345             350

Gln Glu Thr Leu Gln Lys Tyr Ser His Leu Tyr Asp Leu Ser Arg Ser
        355             360             365

Glu Lys Glu Lys Leu His Asp Glu Ala Val Ala Ile Cys Leu Asp Gly
    370             375             380

Gln Pro Leu Ala Met Ile Gln Gln Leu Leu Glu Val Ala Val Gly Pro
385             390             395             400

Leu Asp Ile Ser Pro Lys Asp Ile Val Gln Ser Ala Ile Met Lys Ile
            405             410             415

Ile Ser Ala Leu Ser Gly Gly Ser Ala Asp Leu Gly Gly Pro Arg Asp
            420             425             430

Pro Leu Lys Val Leu Glu Gly Val Val Ala Ala Val His Ala Ser Val
```

```
                435                    440                    445
Asp Lys Gly Glu Glu Leu Val Ser Pro Glu Asp Leu Leu Glu Trp Leu
    450                 455             460
Arg Pro Phe Cys Ala Asp Asp Ala Trp Pro Val Arg Pro Arg Ile His
465             470             475                         480
Val Leu Gln Ile Leu Gly Gln Ser Phe His Leu Thr Glu Glu Asp Ser
                485                 490                 495
Lys Leu Leu Val Phe Phe Arg Thr Glu Ala Ile Leu Lys Ala Ser Trp
                500                 505             510
Pro Gln Arg Gln Val Asp Ile Ala Asp Ile Glu Asn Glu Glu Asn Arg
            515                 520                 525
Tyr Cys Leu Phe Met Glu Leu Leu Glu Ser Ser His His Glu Ala Glu
    530                 535                 540
Phe Gln His Leu Val Leu Leu Leu Gln Ala Trp Pro Pro Met Lys Ser
545                 550                 555                 560
Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg Leu Ala Thr Val Met
                565                 570                 575
Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly Asn Glu Val
            580                 585                 590
Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro Ala
            595                 600                 605
Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Asn Gln Ser Leu Leu
    610                 615                 620
Leu Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu His
625                 630                 635                 640
Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp Ser
                645                 650                 655
Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu Leu
            660                 665                 670
Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His Leu
    675                 680                 685
Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly Arg
    690                 695                 700
His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu Leu
705                 710                 715                 720
Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala Leu
                725                 730                 735
Arg Ala Ala Gln His Trp Val
            740
```

<210> 102
<211> 235
<212> PRT
<213> Homo sapiens

<400> 102

Met Leu Asn Leu Gly Ser Trp Pro Gly Leu Val Ala Ala Ser Leu Phe
1   5   10   15

Leu Leu Lys Gly Val Phe Ser Leu Phe Val Gln Leu Leu Lys Asn Pro
            20   25   30

Leu Gln His Pro Arg Asn Arg Ala Thr His Leu Leu Ala Thr Pro Gly
        35   40   45

Ala Arg Val Leu Gln Glu His Leu Ser Ile His Pro Val Cys His Gln
    50   55   60

Ser Gln Pro Pro Glu Ala Leu Ser Ser Thr Gln His Thr Gly Gln Pro
65   70   75   80

Pro Gly Gln Pro Ser Ala Pro Ser Gln Leu Ser Ala Pro Arg Arg Tyr
            85   90   95

Ser Ser Ser Leu Ser Pro Ile Gln Ala Pro Asn His Pro Pro Pro Gln
            100   105   110

Pro Pro Thr Gln Ala Thr Pro Leu Met His Thr Lys Pro Asn Ser Gln
            115   120   125

Gly Pro Pro Asn Pro Met Ala Leu Pro Ser Glu His Gly Leu Glu Gln
    130   135   140

Pro Ser His Thr Pro Pro Gln Thr Pro Thr Pro Pro Ser Thr Pro Pro
145   150   155   160

Leu Gly Lys Gln Asn Pro Ser Leu Pro Ala Pro Gln Thr Leu Ala Gly
            165   170   175

Gly Asn Pro Glu Thr Ala Gln Pro His Ala Gly Thr Leu Pro Arg Pro
            180   185   190

Arg Pro Val Pro Lys Pro Arg Asn Arg Pro Ser Val Pro Pro Pro Pro
    195   200   205

Gln Pro Pro Gly Val His Ser Ala Gly Asp Ser Ser Leu Thr Asn Thr
    210   215   220

Ala Pro Thr Ala Ser Lys Ile Val Thr Asp Val
225   230   235

<210> 103
<211> 402
<212> PRT
<213> Homo sapiens

<400> 103
Met Tyr Ser Gly Asn Arg Ser Gly Gly His Gly Tyr Trp Asp Gly Gly
1   5   10   15

Gly Ala Ala Gly Ala Glu Gly Pro Ala Pro Ala Gly Thr Leu Ser Pro
            20   25   30

Ala Pro Leu Phe Ser Pro Gly Thr Tyr Glu Arg Leu Ala Leu Leu Leu
        35   40   45

Gly Ser Ile Gly Leu Leu Gly Val Gly Asn Asn Leu Leu Val Leu Val
    50   55   60

Leu Tyr Tyr Lys Phe Gln Arg Leu Arg Thr Pro Thr His Leu Leu Leu
65   70   75   80

```
Val Asn Ile Ser Leu Ser Asp Leu Leu Val Ser Leu Phe Gly Val Thr
            85                  90                  95

Phe Thr Phe Val Ser Cys Leu Arg Asn Gly Trp Val Trp Asp Thr Val
            100             105             110

Gly Cys Val Trp Asp Gly Phe Ser Gly Ser Leu Phe Gly Ile Val Ser
            115             120             125

Ile Ala Thr Leu Thr Val Leu Ala Tyr Glu Arg Tyr Ile Arg Val Val
    130             135             140

His Ala Arg Val Ile Asn Phe Ser Trp Ala Trp Arg Ala Ile Thr Tyr
145             150             155             160

Ile Trp Leu Tyr Ser Leu Ala Trp Ala Gly Ala Pro Leu Leu Gly Trp
            165             170             175

Asn Arg Tyr Ile Leu Asp Val His Gly Leu Gly Cys Thr Val Asp Trp
            180             185             190

Lys Ser Lys Asp Ala Asn Asp Ser Ser Phe Val Leu Phe Leu Phe Leu
            195             200             205

Gly Cys Leu Val Val Pro Leu Gly Val Ile Ala His Cys Tyr Gly His
    210             215             220

Ile Leu Tyr Ser Ile Arg Met Leu Arg Cys Val Glu Asp Leu Gln Thr
225             230             235             240

Ile Gln Val Ile Lys Ile Leu Lys Tyr Glu Lys Lys Leu Ala Lys Met
            245             250             255

Cys Phe Leu Met Ile Phe Thr Phe Leu Val Cys Trp Met Pro Tyr Ile
            260             265             270

Val Ile Cys Phe Leu Val Val Asn Gly His Gly His Leu Val Thr Pro
            275             280             285

Thr Ile Ser Ile Val Ser Tyr Leu Phe Ala Lys Ser Asn Thr Val Tyr
    290             295             300

Asn Pro Val Ile Tyr Val Phe Met Ile Arg Lys Phe Arg Arg Ser Leu
305             310             315             320

Leu Gln Leu Leu Cys Leu Arg Leu Leu Arg Cys Gln Arg Pro Ala Lys
            325             330             335

Asp Leu Pro Ala Ala Gly Ser Glu Met Gln Ile Arg Pro Ile Val Met
            340             345             350

Ser Gln Lys Asp Gly Asp Arg Pro Lys Lys Lys Val Thr Phe Asn Ser
            355             360             365

Ser Ser Ile Ile Phe Ile Ile Thr Ser Asp Glu Ser Leu Ser Val Asp
            370             375             380

Asp Ser Asp Lys Thr Asn Gly Ser Lys Val Asp Val Ile Gln Val Arg
385             390             395             400

Pro Leu
```

<210> 104

<211> 101
<212> PRT
<213> Homo sapiens

<400> 104
Met Lys Gln Arg Leu Arg Gly Gln Gln Gly Phe Gln Leu Asp Val Cys
 1   5   10   15

Val Ala Cys Thr Leu Leu Phe Leu Leu Leu Thr Val Asn Ser Gly Val
                20   25   30

Thr Ser Arg Glu Gln Leu Gly Cys Ser Arg Pro Ser Pro Ala Gln Gly
            35   40   45

Glu Gly Arg Gly Thr Cys Ser Ser Glu Gln Pro Glu Gly Gly Gly Arg
    50   55   60

Ser Glu Val Val Glu Trp Phe Val Tyr Leu Thr Gly Leu Lys Gly Pro
65   70   75   80

Ser Val Phe Val Val Cys Phe Val Ser Cys Phe Ser Asp Arg Ser Ile
                85   90   95

Thr Thr Asp Leu Leu
            100

<210> 105
<211> 185
<212> PRT
<213> Homo sapiens

<400> 105
Met Lys Phe Thr Ile Val Phe Ala Gly Leu Leu Gly Val Phe Leu Ala
 1   5   10   15

Pro Ala Leu Ala Asn Tyr Asn Ile Asn Val Asn Asp Asp Asn Asn Asn
                20   25   30

Ala Gly Ser Gly Gln Gln Ser Val Ser Val Asn Asn Glu His Asn Val
            35   40   45

Ala Asn Val Asp Asn Asn Asn Gly Trp Asp Ser Trp Asn Ser Ile Trp
    50   55   60

Asp Tyr Gly Asn Gly Phe Ala Ala Thr Arg Leu Phe Gln Lys Lys Thr
65   70   75   80

Cys Ile Val His Lys Met Asn Lys Glu Val Met Pro Ser Ile Gln Ser
                85   90   95

Leu Asp Ala Leu Val Lys Glu Lys Lys Leu Gln Gly Lys Gly Pro Gly
            100   105   110

Gly Pro Pro Pro Lys Gly Leu Met Tyr Ser Val Asn Pro Asn Lys Val
        115   120   125

Asp Asp Leu Ser Lys Phe Gly Lys Asn Ile Ala Asn Met Cys Arg Gly
    130   135   140

Ile Pro Thr Tyr Met Ala Glu Glu Met Gln Glu Ala Ser Leu Phe Phe
145   150   155   160

Tyr Ser Gly Thr Cys Tyr Thr Thr Ser Val Leu Trp Ile Val Asp Ile
                165   170   175

Ser Phe Cys Gly Asp Thr Val Glu Asn
            180   185

<210> 106
<211> 231
<212> PRT
<213> Homo sapiens

<400> 106
Met Ser Arg Ala Met Ala Leu Phe Phe Val Leu Cys Trp Ile Gln Gly
 1   5   10   15

Tyr Ser Gln Gln Lys Ser Leu Asn Asn Ala Ala Phe Ala Ser Gly Ser
            20   25   30

Asn Glu Arg Glu Glu His Leu Ala Lys Ile Phe Asp Glu Ile Leu Leu
         35   40   45

Gln Val Phe Pro Lys Phe Pro Tyr Asp Pro Ser Phe Asn Glu Ala Thr
     50   55   60

Ala Val Arg Ser Ile Thr Lys Thr Asp Met Arg Lys Gly Thr Ser Ile
 65   70   75   80

Ala Trp Asn Ser Pro Lys Pro Glu Tyr Phe Leu Gly Ser Val Asp Lys
                 85   90   95

Ile Pro Asp Lys Asp His Leu Ser Glu Glu Lys Asn Phe Lys Glu Ser
            100   105   110

Cys Leu Phe Asp Arg Asp Leu Arg Glu Gln Leu Thr Thr Ile Asp Lys
         115   120   125

Glu Thr Leu Gln Gly Ala Ala Lys Pro Asp Ala His Phe Arg Thr Met
    130   135   140

Pro Cys Gly Gln Leu Leu His Phe Leu Gln Arg Asn Thr Ile Ile Ala
145   150   155   160

Thr Val Ser Gly Val Ala Ile Leu Met Ala Ile Val Leu Leu Leu Leu
                165   170   175

Gly Leu Ala Ser Tyr Ile Arg Lys Lys Gln Pro Ser Ser Pro Leu Ala
            180   185   190

Asn Thr Thr Tyr Asn Ile Phe Ile Met Asp Gly Lys Thr Trp Trp His
         195   200   205

Asn Ser Glu Glu Lys Asn Phe Thr Lys Leu Ala Lys Lys Gln Lys Gln
    210   215   220

Leu Lys Ser Ser Ser Cys Val
225   230

<210> 107
<211> 136
<212> PRT
<213> Homo sapiens

<400> 107
Met Ala Ser Leu Gly Leu Leu Leu Leu Leu Leu Leu Thr Ala Leu Pro
 1   5   10   15

Pro Leu Trp Ser Ser Ser Leu Pro Gly Leu Asp Thr Ala Glu Ser Lys

68

```
          20                      25                      30

Ala Thr Ile Ala Asp Leu Ile Leu Ser Ala Leu Glu Arg Ala Thr Val
        35              40              45

Phe Leu Glu Gln Arg Leu Pro Glu Ile Asn Leu Asp Gly Met Val Gly
    50                  55                  60

Val Arg Val Leu Glu Glu Gln Leu Lys Ser Val Arg Glu Lys Trp Ala
65              70              75                          80

Gln Glu Pro Leu Leu Gln Pro Leu Ser Leu Arg Val Gly Met Leu Gly
            85                  90                      95

Glu Lys Leu Glu Ala Ala Ile Gln Arg Ser Leu His Tyr Leu Lys Leu
            100             105             110

Ser Asp Pro Lys Tyr Leu Arg Gly Arg Thr Ala Ala Ser Pro Ala Ala
        115             120             125

Ser Gln Thr Ser Ala Gly Ala Ser
    130             135


<210> 108
<211> 606
<212> PRT
<213> Homo sapiens

<400> 108
Met Thr Val Val Gly Asn Pro Arg Ser Trp Ser Cys Gln Trp Leu Pro
  1             5               10              15

Ile Leu Ile Leu Leu Leu Gly Thr Gly His Gly Pro Gly Val Glu Gly
            20              25              30

Val Thr His Tyr Lys Ala Gly Asp Pro Val Ile Leu Tyr Val Asn Lys
        35              40              45

Val Gly Pro Tyr His Asn Pro Gln Glu Thr Tyr His Tyr Tyr Gln Leu
    50              55              60

Pro Val Cys Cys Pro Glu Lys Ile Arg His Lys Ser Leu Ser Leu Gly
65              70              75                          80

Glu Val Leu Asp Gly Asp Arg Met Ala Glu Ser Leu Tyr Glu Ile Arg
            85              90                      95

Phe Arg Glu Asn Val Glu Lys Arg Ile Leu Cys His Met Gln Leu Ser
            100             105             110

Ser Ala Gln Val Glu Gln Leu Arg Gln Ala Ile Glu Glu Leu Tyr Tyr
        115             120             125

Phe Glu Phe Val Val Asp Asp Leu Pro Ile Arg Gly Phe Val Gly Tyr
    130             135             140

Met Glu Glu Ser Gly Phe Leu Pro His Ser His Lys Ile Gly Leu Trp
145             150             155                         160

Thr His Leu Asp Phe His Leu Glu Phe His Gly Asp Arg Ile Ile Phe
            165             170             175

Ala Asn Val Ser Val Arg Asp Val Lys Pro His Ser Leu Asp Gly Leu
        180             185             190
```

Arg Pro Asp Glu Phe Leu Gly Leu Thr His Thr Tyr Ser Val Arg Trp
     195   200   205

Ser Glu Thr Ser Val Glu Arg Arg Ser Asp Arg Arg Arg Gly Asp Asp
     210   215   220

Gly Gly Phe Phe Pro Arg Thr Leu Glu Ile His Trp Leu Ser Ile Ile
225   230   235   240

Asn Ser Met Val Leu Val Phe Leu Leu Val Gly Phe Val Ala Val Ile
           245   250   255

Leu Met Arg Val Leu Arg Asn Asp Leu Ala Arg Tyr Asn Leu Asp Glu
           260   265   270

Glu Thr Thr Ser Ala Gly Ser Gly Asp Asp Phe Asp Gln Gly Asp Asn
        275   280   285

Gly Trp Lys Ile Ile His Thr Asp Val Phe Arg Phe Pro Pro Tyr Arg
     290   295   300

Gly Leu Leu Cys Ala Val Leu Gly Val Gly Ala Gln Phe Leu Ala Leu
305   310   315   320

Gly Thr Gly Ile Ile Val Met Ala Leu Leu Gly Met Phe Asn Val His
           325   330   335

Arg His Gly Ala Ile Asn Ser Ala Ala Ile Leu Leu Tyr Ala Leu Thr
        340   345   350

Cys Cys Ile Ser Gly Tyr Val Ser Ser His Phe Tyr Arg Gln Ile Gly
        355   360   365

Gly Glu Arg Trp Val Trp Asn Ile Ile Leu Thr Thr Ser Leu Phe Ser
     370   375   380

Val Pro Phe Phe Leu Thr Trp Ser Val Val Asn Ser Val His Trp Ala
385   390   395   400

Asn Gly Ser Thr Gln Ala Leu Pro Ala Thr Thr Ile Leu Leu Leu Leu
           405   410   415

Thr Val Trp Leu Leu Val Gly Phe Pro Leu Thr Val Ile Gly Gly Ile
           420   425   430

Phe Gly Lys Asn Asn Ala Ser Pro Phe Asp Ala Pro Cys Arg Thr Lys
        435   440   445

Asn Ile Ala Arg Glu Ile Pro Pro Gln Pro Trp Tyr Lys Ser Thr Val
     450   455   460

Ile His Met Thr Val Gly Gly Phe Leu Pro Phe Ser Ala Ile Ser Val
465   470   475   480

Glu Leu Tyr Tyr Ile Phe Ala Thr Val Trp Gly Arg Glu Gln Tyr Thr
           485   490   495

Leu Tyr Gly Ile Leu Phe Phe Val Phe Ala Ile Leu Leu Ser Val Gly
        500   505   510

Ala Cys Ile Ser Ile Ala Leu Thr Tyr Phe Gln Leu Ser Gly Glu Asp
        515   520   525

Tyr Arg Trp Trp Trp Arg Ser Val Leu Ser Val Gly Ser Thr Gly Leu
     530   535   540

Phe Ile Phe Leu Tyr Ser Val Phe Tyr Tyr Ala Arg Arg Ser Asn Met
545   550   555   560

Ser Gly Ala Val Gln Thr Val Glu Phe Phe Gly Tyr Ser Leu Leu Thr
                565   570   575

Gly Tyr Val Phe Phe Leu Met Leu Gly Thr Ile Ser Phe Phe Ser Ser
                580   585   590

Leu Lys Phe Ile Arg Tyr Ile Tyr Val Asn Leu Lys Met Asp
            595   600   605

<210> 109
<211> 310
<212> PRT
<213> Homo sapiens

<400> 109
Met Ala Leu Arg Arg Pro Pro Arg Leu Arg Leu Cys Ala Arg Leu Pro
  1   5   10   15

Asp Phe Phe Leu Leu Leu Leu Phe Arg Gly Cys Leu Ile Gly Ala Val
                20   25   30

Asn Leu Lys Ser Ser Asn Arg Thr Pro Val Val Gln Glu Phe Glu Ser
            35   40   45

Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr Ser Asp Pro Arg
        50   55   60

Ile Glu Trp Lys Lys Ile Gln Asp Glu Gln Thr Thr Tyr Val Phe Phe
 65   70   75   80

Asp Asn Lys Ile Gln Gly Asp Leu Ala Gly Arg Ala Glu Ile Leu Gly
                85   90   95

Lys Thr Ser Leu Lys Ile Trp Asn Val Thr Arg Arg Asp Ser Ala Leu
            100   105   110

Tyr Arg Cys Glu Val Val Ala Arg Asn Asp Arg Lys Glu Ile Asp Glu
        115   120   125

Ile Val Ile Glu Leu Thr Val Gln Val Lys Pro Val Thr Pro Val Cys
    130   135   140

Arg Val Pro Lys Ala Val Pro Val Gly Lys Met Ala Thr Leu His Cys
145   150   155   160

Gln Glu Ser Glu Gly His Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn
                165   170   175

Asp Val Pro Leu Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Arg Asn
            180   185   190

Ser Ser Phe His Leu Asn Ser Glu Thr Gly Thr Leu Val Phe Thr Ala
            195   200   205

Val His Lys Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp
    210   215   220

Ala Gly Ser Ala Arg Cys Glu Glu Gln Glu Met Glu Val Tyr Asp Leu
225   230   235   240

Asn Ile Gly Gly Ile Ile Gly Gly Val Leu Val Val Leu Ala Val Leu
                245   250   255

Ala Leu Ile Thr Leu Gly Ile Cys Cys Ala Tyr Arg Arg Gly Tyr Phe
                260   265   270

Ile Asn Asn Lys Gln Asp Gly Glu Ser Tyr Lys Asn Pro Gly Lys Pro
        275   280   285

Asp Gly Val Asn Tyr Ile Arg Thr Asp Glu Glu Gly Asp Phe Arg His
    290   295   300

Lys Ser Ser Phe Val Ile
305   310

<210> 110
<211> 247
<212> PRT
<213> Homo sapiens

<400> 110
Met Glu Lys Cys Leu Gln Asp Phe Cys Leu Pro Phe Leu Arg Ile Thr
  1   5   10   15

Ser Leu Leu Gln His His Leu Phe Gly Glu Asp Leu Pro Ser Cys Gln
        20   25   30

Glu Glu Glu Glu Phe Ser Val Leu Ala Ser Cys Leu Gly Leu Leu Pro
        35   40   45

Thr Phe Tyr Gln Thr Glu His Pro Phe Ile Ser Ala Ser Cys Leu Asp
    50   55   60

Trp Pro Val Pro Ala Phe Asp Ile Ile Thr Gln Trp Cys Phe Glu Ile
 65   70   75   80

Lys Ser Phe Thr Glu Arg His Ala Glu Gln Gly Lys Ala Leu Leu Ile
            85   90   95

Gln Glu Ser Lys Trp Lys Leu Pro His Leu Leu Gln Leu Pro Glu Asn
            100   105   110

Tyr Asn Thr Ile Phe Gln Tyr Tyr His Arg Lys Thr Cys Ser Val Cys
        115   120   125

Thr Lys Val Pro Lys Asp Pro Ala Val Cys Leu Val Cys Gly Thr Phe
    130   135   140

Val Cys Leu Lys Gly Leu Cys Cys Lys Gln Gln Ser Tyr Cys Glu Cys
145   150   155   160

Val Leu His Ser Gln Asn Cys Gly Ala Gly Thr Gly Ile Phe Leu Leu
            165   170   175

Ile Asn Ala Ser Val Ile Ile Ile Arg Gly His Arg Phe Cys Leu
        180   185   190

Trp Gly Ser Val Tyr Leu Asp Ala His Gly Glu Glu Asp Arg Asp Leu
        195   200   205

Arg Arg Gly Lys Pro Leu Tyr Ile Cys Lys Glu Arg Tyr Lys Val Leu
    210   215   220

Glu Gln Gln Trp Ile Ser His Thr Phe Asp His Ile Asn Lys Arg Trp
225   230   235   240

Gly Pro His Tyr Asn Gly Leu

245

```
<210> 111
<211> 559
<212> PRT
<213> Homo sapiens

<400> 111
Met Val Leu Leu His Trp Cys Leu Leu Trp Leu Leu Phe Pro Leu Ser
  1               5                  10                  15

Ser Arg Thr Gln Lys Leu Pro Thr Arg Asp Glu Glu Leu Phe Gln Met
             20                  25                  30

Gln Ile Arg Asp Lys Ala Phe Phe His Asp Ser Ser Val Ile Pro Asp
             35                  40                  45

Gly Ala Glu Ile Ser Ser Tyr Leu Phe Arg Asp Thr Pro Lys Arg Tyr
     50                  55                  60

Phe Phe Val Val Glu Glu Asp Asn Thr Pro Leu Ser Val Thr Val Thr
65                  70                  75                  80

Pro Cys Asp Ala Pro Leu Glu Trp Lys Leu Ser Leu Gln Glu Leu Pro
                 85                  90                  95

Glu Asp Arg Ser Gly Glu Gly Ser Gly Asp Leu Glu Pro Leu Glu Gln
             100                 105                 110

Gln Lys Gln Gln Ile Ile Asn Glu Glu Gly Thr Glu Leu Phe Ser Tyr
             115                 120                 125

Lys Gly Asn Asp Val Glu Tyr Phe Ile Ser Ser Ser Ser Pro Ser Gly
     130                 135                 140

Leu Tyr Gln Leu Asp Leu Leu Ser Thr Glu Lys Asp Thr His Phe Lys
145                 150                 155                 160

Val Tyr Ala Thr Thr Thr Pro Glu Ser Asp Gln Pro Tyr Pro Glu Leu
                 165                 170                 175

Pro Tyr Asp Pro Arg Val Asp Val Thr Ser Leu Gly Arg Thr Thr Val
             180                 185                 190

Thr Leu Ala Trp Lys Pro Ser Pro Thr Ala Ser Leu Leu Lys Gln Pro
             195                 200                 205

Ile Gln Tyr Cys Val Val Ile Asn Lys Glu His Asn Phe Lys Ser Leu
     210                 215                 220

Cys Ala Val Glu Ala Lys Leu Ser Ala Asp Asp Ala Phe Met Met Ala
225                 230                 235                 240

Pro Lys Pro Gly Leu Asp Phe Ser Pro Phe Asp Phe Ala His Phe Gly
                 245                 250                 255

Phe Pro Ser Asp Asn Ser Gly Lys Glu Arg Ser Phe Gln Ala Lys Pro
             260                 265                 270

Ser Pro Lys Leu Gly Arg His Val Tyr Ser Arg Pro Lys Val Asp Ile
             275                 280                 285

Gln Lys Ile Cys Ile Gly Asn Lys Asn Ile Phe Thr Val Ser Asp Leu
     290                 295                 300
```

Lys Pro Asp Thr Gln Tyr Tyr Phe Asp Val Phe Val Val Asn Ile Asn
305   310   315   320

Ser Asn Met Ser Thr Ala Tyr Val Gly Thr Phe Ala Arg Thr Lys Glu
            325   330   335

Glu Ala Lys Gln Lys Thr Val Glu Leu Lys Asp Gly Lys Ile Thr Asp
            340   345   350

Val Phe Val Lys Arg Lys Gly Ala Lys Phe Leu Arg Phe Ala Pro Val
            355   360   365

Ser Ser His Gln Lys Val Thr Phe Phe Ile His Ser Cys Leu Asp Ala
    370   375   380

Val Gln Ile Gln Val Arg Arg Asp Gly Lys Leu Leu Leu Ser Gln Asn
385   390   395   400

Val Glu Gly Ile Gln Gln Phe Gln Leu Arg Gly Lys Pro Lys Ala Lys
            405   410   415

Tyr Leu Val Arg Leu Lys Gly Asn Lys Lys Gly Ala Ser Met Leu Lys
            420   425   430

Ile Leu Ala Thr Thr Arg Pro Thr Lys Gln Ser Phe Pro Ser Leu Pro
    435   440   445

Glu Asp Thr Arg Ile Lys Ala Phe Asp Lys Leu Arg Thr Cys Ser Ser
    450   455   460

Ala Thr Val Ala Trp Leu Gly Thr Gln Glu Arg Asn Lys Phe Cys Ile
465   470   475   480

Tyr Lys Lys Glu Val Asp Asp Asn Tyr Asn Glu Asp Gln Lys Lys Arg
            485   490   495

Glu Gln Asn Gln Cys Leu Gly Pro Asp Ile Arg Lys Lys Ser Glu Lys
            500   505   510

Val Leu Cys Lys Tyr Phe His Ser Gln Asn Leu Gln Lys Ala Val Thr
            515   520   525

Thr Glu Thr Ile Lys Gly Leu Gln Pro Gly Lys Ser Leu Pro Ala Gly
    530   535   540

Cys Leu Cys His Arg Thr Trp Gly Ala Leu Cys Lys Val Ser Glu
545   550   555

<210> 112
<211> 71
<212> PRT
<213> Homo sapiens

<400> 112
Met Ser Pro Ser His Ser Pro Val Ser Cys Phe Lys Leu Arg Val Leu
  1   5   10   15

Val Phe Pro Leu Pro Leu Phe Leu Gly Thr Ala Leu Cys Ser Val Trp
            20   25   30

Asp Pro Arg Ala Arg Pro Leu Gly Leu Val Ala Ala Ala Arg Pro Leu
            35   40   45

Gly Pro Ser Thr Cys Pro Ser Pro Arg Phe Pro Ala Ser Ser Ala Gly
    50   55   60

74

```
Thr Leu Lys Leu Arg Ala Arg
 65                  70
```

<210> 113
<211> 158
<212> PRT
<213> Homo sapiens

<400> 113
```
Met Ala Leu Glu Val Leu Met Leu Leu Ala Val Leu Ile Trp Thr Gly
 1               5                   10                  15

Ala Glu Asn Leu His Val Lys Ile Ser Cys Ser Leu Asp Trp Leu Met
                20              25              30

Val Ser Val Ile Pro Val Ala Glu Ser Arg Asn Leu Tyr Ile Phe Ala
            35              40              45

Asp Glu Leu His Leu Gly Met Gly Cys Pro Ala Asn Arg Ile His Thr
        50              55              60

Tyr Val Tyr Glu Phe Ile Tyr Leu Val Arg Asp Cys Gly Ile Arg Thr
 65              70              75              80

Arg Val Val Ser Glu Glu Thr Leu Leu Phe Gln Thr Glu Leu Tyr Phe
            85              90              95

Thr Pro Arg Asn Ile Asp His Asp Pro Gln Glu Ile His Leu Glu Cys
           100             105             110

Ser Thr Ser Arg Lys Ser Val Trp Leu Thr Pro Val Ser Thr Glu Asn
           115             120             125

Glu Ile Lys Leu Asp Pro Ser Pro Phe Ile Ala Asp Phe Gln Thr Thr
           130             135             140

Ala Glu Glu Leu Gly Leu Leu Ser Ser Ser Pro Asn Leu Leu
145             150             155
```

<210> 114
<211> 170
<212> PRT
<213> Homo sapiens

<400> 114
```
Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg
 1               5                   10                  15

Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Asp Phe Asp
                20              25              30

Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val Gln Cys
            35              40              45

Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu Ser Ile
        50              55              60

Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val Leu Thr
 65              70              75              80

Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg His Gln
                85              90              95
```

Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr Ser Gly
            100   105   110

Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro Leu Gln
        115   120   125

Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala Ile Leu
    130   135   140

Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala Pro His
145   150   155   160

Ala Val His Pro Thr Gly Thr Lys Ala Leu
            165   170

<210> 115
<211> 354
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 115
Met Ala Gly Pro Arg Leu Leu Phe Leu Xaa Ala Leu Ala Leu Glu Leu
  1   5   10   15

Leu Gly Arg Ala Gly Gly Ser Gln Pro Ala Leu Arg Ser Arg Gly Thr
            20   25   30

Ala Thr Ala Cys Arg Leu Asp Asn Lys Glu Ser Glu Ser Trp Gly Ala
        35   40   45

Leu Leu Ser Gly Glu Arg Leu Asp Thr Trp Ile Cys Ser Leu Leu Gly
    50   55   60

Ser Leu Met Val Gly Leu Ser Gly Val Phe Pro Leu Leu Val Ile Pro
 65   70   75   80

Leu Glu Met Gly Thr Met Leu Arg Ser Glu Ala Gly Ala Trp Arg Leu
            85   90   95

Lys Gln Leu Leu Ser Phe Ala Leu Gly Gly Leu Leu Gly Asn Val Phe
        100   105   110

Leu His Leu Leu Pro Glu Ala Trp Ala Tyr Thr Cys Ser Ala Ser Pro
        115   120   125

Gly Gly Glu Gly Gln Ser Leu Gln Gln Gln Gln Leu Gly Leu Trp
    130   135   140

Val Ile Ala Gly Ile Leu Thr Phe Leu Ala Leu Glu Lys Met Phe Leu
145   150   155   160

Asp Ser Lys Glu Glu Gly Thr Ser Gln Ala Pro Asn Lys Asp Pro Thr
            165   170   175

Ala Ala Ala Ala Ala Leu Asn Gly Gly His Cys Leu Ala Gln Pro Ala
            180   185   190

Ala Glu Pro Gly Leu Gly Ala Val Val Arg Ser Ile Lys Val Ser Gly
        195   200   205

Tyr Leu Asn Leu Leu Ala Asn Thr Ile Asp Asn Phe Thr His Gly Leu
    210   215   220

Ala Val Ala Ala Ser Phe Leu Val Ser Lys Lys Ile Gly Leu Leu Thr
225   230   235   240

Thr Met Ala Ile Leu Leu His Glu Ile Pro His Glu Val Gly Asp Phe
                245   250   255

Ala Ile Leu Leu Arg Ala Gly Phe Asp Arg Trp Ser Ala Ala Lys Leu
            260   265   270

Gln Leu Ser Thr Ala Leu Gly Gly Leu Leu Gly Ala Gly Phe Ala Ile
        275   280   285

Cys Thr Gln Ser Pro Lys Gly Val Glu Glu Thr Ala Ala Trp Val Leu
    290   295   300

Pro Phe Thr Ser Gly Gly Phe Leu Tyr Ile Ala Leu Val Asn Val Leu
305   310   315   320

Pro Asp Leu Leu Glu Glu Glu Asp Pro Trp Arg Ser Leu Gln Gln Leu
            325   330   335

Leu Leu Leu Cys Ala Gly Ile Val Val Met Val Leu Phe Ser Leu Phe
            340   345   350

Val Asp

<210> 116
<211> 145
<212> PRT
<213> Homo sapiens

<400> 116
Met Ser Gln Ala Trp Val Pro Gly Leu Ala Pro Thr Leu Leu Phe Ser
  1   5   10   15

Leu Leu Ala Gly Pro Gln Lys Ile Ala Ala Lys Cys Gly Leu Ile Leu
            20   25   30

Ala Cys Pro Lys Gly Phe Lys Cys Cys Gly Asp Ser Cys Cys Gln Glu
        35   40   45

Asn Glu Leu Phe Pro Gly Pro Val Arg Ile Phe Val Ile Ile Phe Leu
        50   55   60

Val Ile Leu Ser Val Phe Cys Ile Cys Gly Leu Ala Lys Cys Phe Cys
65   70   75   80

Arg Asn Cys Arg Glu Pro Glu Pro Asp Ser Pro Val Asp Cys Arg Gly
            85   90   95

Pro Leu Glu Leu Pro Ser Ile Ile Pro Pro Glu Arg Val Ile Leu Lys
            100   105   110

Pro Ser Leu Gly Pro Thr Pro Thr Glu Pro Pro Pro Tyr Ser Phe
            115   120   125

Arg Pro Glu Glu Tyr Thr Gly Asp Gln Arg Gly Ile Asp Asn Pro Ala
    130   135   140

Phe
145

<210> 117
<211> 79
<212> PRT
<213> Homo sapiens

<400> 117
Met Leu Arg Leu Thr Gln Thr Phe Phe Phe Ile Ser Gln Thr Leu Leu
1   5   10   15

Asp Trp Phe Leu Ala Ala Ala Leu Ala Leu Pro Asn Leu Cys Ser Pro
            20   25   30

Leu Ala Ser Asn Phe Lys Ser Arg Gln Ile Ser Ser Val Pro Ile Gln
            35   40   45

Pro Ser Gln Gly Thr Ser Arg Val Ala Leu Gln Ile Trp Cys Gly Ser
    50   55   60

Cys Arg Met Arg Met Ser Ser Ser Thr Ile His Ile Leu Ala Leu
65   70   75

<210> 118
<211> 82
<212> PRT
<213> Homo sapiens

<400> 118
Met Leu Leu Leu Gln Ser Leu Phe Phe Pro Met Ser Trp Gly Ser Gly
1   5   10   15

Gly Gly Gly Lys Gly Arg Asp Asp Leu Pro Arg Glu Lys Pro Thr Thr
            20   25   30

Cys Pro Val Phe Asp Arg Leu Phe Asp Ile Phe Ala Lys Ile Pro Leu
            35   40   45

Val Glu Ser Gln Ala Ser Cys Ala Arg Ile Gly Ile Ala Ala Ser His
    50   55   60

Trp Arg Leu Asp Cys Ser Val Asp Gly Met Gln Ala Asp Cys Leu Ser
65   70   75   80

Leu Ile

<210> 119
<211> 347
<212> PRT
<213> Homo sapiens

<400> 119
Met Val Thr Arg Ala Gly Ala Gly Thr Ala Val Ala Gly Ala Val Val
1   5   10   15

Val Ala Leu Leu Ser Ala Ala Leu Ala Leu Tyr Gly Pro Pro Leu Asp
            20   25   30

Ala Val Leu Glu Arg Ala Phe Ser Leu Arg Lys Ala His Ser Ile Lys
            35   40   45

Asp Met Glu Asn Thr Leu Gln Leu Val Arg Asn Ile Ile Pro Pro Leu
    50   55   60

```
Ser Ser Thr Lys His Lys Gly Gln Asp Gly Arg Ile Gly Val Val Gly
 65              70              75                          80

Gly Cys Gln Glu Tyr Thr Gly Ala Pro Tyr Phe Ala Ala Ile Ser Ala
                85              90                  95

Leu Lys Val Gly Ala Asp Leu Ser His Val Phe Cys Ala Ser Ala Ala
            100             105             110

Ala Pro Val Ile Lys Ala Tyr Ser Pro Glu Leu Ile Val His Pro Val
        115             120             125

Leu Asp Ser Pro Asn Ala Val His Glu Val Glu Lys Trp Leu Pro Arg
    130             135             140

Leu His Ala Leu Val Val Gly Pro Gly Leu Gly Arg Asp Asp Ala Leu
145             150             155                         160

Leu Arg Asn Val Gln Gly Ile Leu Glu Val Ser Lys Ala Arg Asp Ile
            165             170             175

Pro Val Val Ile Asp Ala Asp Gly Leu Trp Leu Val Ala Gln Gln Pro
            180             185             190

Ala Leu Ile His Gly Tyr Arg Lys Ala Val Leu Thr Pro Asn His Val
        195             200             205

Glu Phe Ser Arg Leu Tyr Asp Ala Val Leu Arg Gly Pro Met Asp Ser
    210             215             220

Asp Asp Ser His Gly Ser Val Leu Arg Leu Ser Gln Ala Leu Gly Asn
225             230             235                         240

Val Thr Val Val Gln Lys Gly Glu Arg Asp Ile Leu Ser Asn Gly Gln
            245             250             255

Gln Val Leu Val Cys Ser Gln Glu Gly Ser Ser Arg Arg Cys Gly Gly
        260             265             270

Gln Gly Asp Leu Leu Ser Gly Ser Leu Gly Val Leu Val His Trp Ala
        275             280             285

Leu Leu Ala Gly Pro Gln Lys Thr Asn Gly Ser Ser Pro Leu Leu Val
    290             295             300

Ala Ala Phe Gly Ala Cys Ser Leu Thr Arg Gln Cys Asn His Gln Ala
305             310             315                         320

Phe Gln Lys His Gly Arg Ser Thr Thr Thr Ser Asp Met Ile Ala Glu
            325             330             335

Val Gly Ala Ala Phe Ser Lys Leu Phe Glu Thr
            340             345
```

<210> 120
<211> 163
<212> PRT
<213> Homo sapiens

<400> 120
```
Met Ser Ser Arg Leu Ile Tyr Thr Leu Arg Cys Gly Val Phe Ala Thr
  1           5               10                  15

Phe Pro Ile Val Leu Gly Ile Leu Val Tyr Gly Leu Ser Leu Leu Cys
```

```
                 20                        25                        30
Phe Ser Ala Leu Arg Pro Phe Gly Glu Pro Arg Arg Glu Val Glu Ile
        35                  40                  45

His Arg Arg Tyr Val Ala Gln Ser Val Gln Leu Phe Ile Leu Tyr Phe
    50                  55                  60

Phe Asn Leu Ala Val Leu Ser Thr Tyr Leu Pro Gln Asp Thr Leu Lys
65                  70                  75                      80

Leu Leu Pro Leu Leu Thr Gly Leu Phe Ala Val Ser Arg Leu Ile Tyr
            85                  90                      95

Trp Leu Thr Phe Ala Val Gly Arg Ser Phe Arg Gly Phe Gly Tyr Gly
            100                 105                 110

Leu Thr Phe Leu Pro Leu Leu Ser Met Leu Met Trp Asn Leu Tyr Tyr
            115                 120                 125

Met Phe Val Val Glu Pro Glu Arg Met Leu Thr Ala Thr Glu Ser Arg
    130                 135                 140

Leu Asp Tyr Pro Asp His Ala Arg Ser Ala Ser Asp Tyr Arg Pro Arg
145                 150                 155                     160

Pro Trp Gly


<210> 121
<211> 258
<212> PRT
<213> Homo sapiens

<400> 121
Met Tyr Ile Trp Phe Ile Ile Phe Phe Ile Gln Pro His Lys Glu Glu
1               5                   10                  15

Arg Phe Leu Phe Pro Val Tyr Pro Leu Ile Cys Leu Cys Gly Ala Val
            20                  25                  30

Ala Leu Ser Ala Leu Gln Lys Cys Tyr His Phe Val Phe Gln Arg Tyr
            35                  40                  45

Arg Leu Glu His Tyr Thr Val Thr Ser Asn Trp Leu Ala Leu Gly Thr
    50                  55                  60

Val Phe Leu Phe Gly Leu Leu Ser Phe Ser Arg Ser Val Ala Leu Phe
65                  70                  75                      80

Arg Gly Tyr His Gly Pro Leu Asp Leu Tyr Pro Glu Phe Tyr Arg Ile
            85                  90                      95

Ala Thr Asp Pro Thr Ile His Thr Val Pro Glu Gly Arg Pro Val Asn
            100                 105                 110

Val Cys Val Gly Lys Glu Trp Tyr Arg Phe Pro Ser Ser Phe Leu Leu
            115                 120                 125

Pro Asp Asn Trp Gln Leu Gln Phe Ile Pro Ser Glu Phe Arg Gly Gln
    130                 135                 140

Leu Pro Lys Pro Phe Ala Glu Gly Pro Leu Ala Thr Arg Ile Val Pro
145                 150                 155                     160
```

```
Thr Asp Met Asn Asp Gln Asn Leu Glu Glu Pro Ser Arg Tyr Ile Asp
            165             170             175
```

```
Ile Ser Lys Cys His Tyr Leu Val Asp Leu Asp Thr Met Arg Glu Thr
            180             185             190
```

```
Pro Arg Glu Pro Lys Tyr Ser Ser Asn Lys Glu Glu Trp Ile Ser Leu
            195             200             205
```

```
Ala Tyr Arg Pro Phe Leu Asp Ala Ser Arg Ser Ser Lys Leu Leu Arg
            210             215             220
```

```
Ala Phe Tyr Val Pro Phe Leu Ser Asp Gln Tyr Thr Val Tyr Val Asn
225             230             235             240
```

```
Tyr Thr Ile Leu Lys Pro Arg Lys Ala Lys Gln Ile Arg Lys Lys Ser
            245             250             255
```

```
Gly Gly
```

<210> 122
<211> 96
<212> PRT
<213> Homo sapiens

<400> 122
```
Met Ala Arg Ala Cys Val Phe Gln Leu Ser Leu Trp Arg Lys Leu Pro
  1           5               10              15
```

```
Val Gly Ile Asn Leu Ser Pro Ala Ile Leu Ser Leu Ser Leu Gly Cys
            20              25              30
```

```
Leu Gly Leu Gly Phe Leu Leu Leu Leu Glu Arg Met Thr Thr Asp Ser
        35              40              45
```

```
Gly Ile Arg Gln Arg Ser Arg His Asp Leu Leu Gly Phe Cys Gly Cys
        50              55              60
```

```
Gln His Cys Arg Ser Phe Trp Arg Leu Arg Glu Ala Leu Glu Gly Ile
65              70              75              80
```

```
Gly Thr Ser Cys Cys Arg Pro Pro Gly Arg Ala Gly Leu Phe Ile Phe
            85              90              95
```

<210> 123
<211> 72
<212> PRT
<213> Homo sapiens

<400> 123
```
Met Arg His Thr Cys Ile Val Asn Ile Ala Ala Ser Leu Leu Val Ala
  1           5               10              15
```

```
Asn Thr Trp Phe Ile Val Val Ala Ala Ile Gln Asp Asn Arg Tyr Ile
            20              25              30
```

```
Leu Cys Lys Thr Ala Cys Val Ala Ala Thr Phe Phe Ile His Phe Phe
        35              40              45
```

```
Tyr Leu Ser Val Phe Phe Trp Met Leu Thr Leu Gly Pro His Ala Val
```

```
                  50                        55                        60
Leu Ser Pro Gly Phe His Ser Ala
 65                      70


<210> 124
<211> 275
<212> PRT
<213> Homo sapiens

<400> 124
Met Thr Ile Thr Ser Phe Tyr Ala Val Cys Phe Tyr Leu Leu Met Leu
 1               5                  10                  15
Val Met Val Glu Gly Phe Gly Gly Lys Glu Ala Val Leu Arg Thr Leu
                20                  25                  30
Arg Asp Thr Pro Met Met Val His Thr Gly Pro Cys Cys Cys Cys Cys
            35                  40                  45
Pro Cys Cys Pro Arg Leu Leu Leu Thr Arg Lys Lys Leu Gln Leu Leu
    50                  55                  60
Met Leu Gly Pro Phe Gln Tyr Ala Phe Leu Lys Ile Thr Leu Thr Leu
 65                  70                  75                      80
Val Gly Leu Phe Leu Ile Pro Asp Gly Ile Tyr Asp Pro Ala Asp Ile
                85                  90                  95
Ser Glu Gly Ser Thr Ala Leu Trp Ile Asn Thr Phe Leu Gly Val Ser
               100                 105                 110
Thr Leu Leu Ala Leu Trp Thr Leu Gly Ile Ile Ser Arg Gln Ala Arg
           115                 120                 125
Leu His Leu Gly Glu Gln Asn Met Gly Ala Lys Phe Ala Leu Phe Gln
       130                 135                 140
Val Leu Leu Ile Leu Thr Ala Leu Gln Pro Ser Ile Phe Ser Val Leu
145                 150                 155                 160
Ala Asn Gly Gly Gln Ile Ala Cys Ser Pro Pro Tyr Ser Ser Lys Thr
               165                 170                 175
Arg Ser Gln Val Met Asn Cys His Leu Leu Ile Leu Glu Thr Phe Leu
           180                 185                 190
Met Thr Val Leu Thr Arg Met Tyr Tyr Arg Arg Lys Asp His Lys Val
           195                 200                 205
Gly Tyr Glu Thr Phe Ser Ser Pro Asp Leu Asp Leu Asn Ser Lys Pro
    210                 215                 220
Lys Val Asp Gly Leu Asp Asn Glu Arg Met Leu Tyr Ser Leu Glu Tyr
225                 230                 235                 240
Lys Ile Pro Leu Leu Ser Leu Asn Leu Asp Gln Met Gly Ser Ile Pro
               245                 250                 255
Pro Cys Gln His Lys Leu Ala Asp Thr Phe Asp Ser Thr Asp Glu Gly
           260                 265                 270
Glu Gln Cys
       275
```

82

<210> 125
<211> 627
<212> PRT
<213> Homo sapiens

<400> 125
Met Glu Ala Arg Val Val His Ala Leu Gln Lys Arg Gln Val Ser Leu
1   5   10   15

Leu Cys Val Phe Leu Gly Val Ser Trp Ala Gly Ala Glu Pro Leu Arg
                20   25   30

Tyr Phe Val Ala Glu Glu Thr Glu Arg Gly Thr Phe Leu Ala Asn Leu
            35   40   45

Ala Ile Asp Leu Gly Leu Gly Val Glu Glu Leu Ser Ala Arg Gly Cys
        50   55   60

Arg Ile Val Ser Asp Glu Thr Ile Gly Phe Leu Leu Leu Asn Pro Leu
65   70   75   80

Thr Gly Asp Leu Leu Leu Asn Glu Lys Leu Asp Arg Glu Glu Leu Cys
                85   90   95

Gly Pro Thr Glu Pro Cys Val Leu Pro Phe Gln Leu Leu Leu Glu Lys
            100   105   110

Pro Phe Gln Ile Phe Arg Ala Glu Leu Trp Val Arg Asp Ile Asn Asp
        115   120   125

His Ser Pro Val Phe Leu Asp Arg Glu Ile Thr Leu Asn Ile Leu Glu
    130   135   140

Ser Thr Thr Pro Gly Ala Thr Phe Leu Leu Glu Ser Ala His Asp Ser
145   150   155   160

Asp Val Gly Ile Asn Asn Leu Arg Asn Tyr Thr Ile Ser Ser Asn Val
                165   170   175

Tyr Phe His Ile Asn Val His Asp Asn Gly Glu Gly Asn Val Tyr Ser
            180   185   190

Glu Leu Val Leu Asp Lys Val Leu Asp Arg Glu Glu Val Pro Glu Leu
        195   200   205

Arg Leu Thr Leu Thr Gly Leu Asp Gly Gly Ser Pro Pro Arg Ser Gly
    210   215   220

Thr Thr Leu Ile Arg Ile Leu Val Leu Asp Ile Asn Asp Asn Val Pro
225   230   235   240

Glu Phe Val Glu Ser Leu Tyr Lys Val Gln Val Pro Glu Asn Ser Pro
                245   250   255

Val Gly Ser Leu Val Val Thr Val Ser Ala Arg Asp Leu Asp Thr Gly
            260   265   270

Ser Asn Gly Glu Ile Val Tyr Ala Phe Phe Tyr Ala Thr Glu Arg Thr
    275   280   285

Leu Lys Thr Phe Arg Ile Asn Ser Thr Ser Gly Asn Leu His Leu Lys
    290   295   300

Ala Glu Leu Asn Tyr Glu Ala Ile Gln Thr Tyr Thr Leu Thr Ile Gln
305   310   315   320

Ala Lys Asp Gly Gly Gly Leu Ser Gly Lys Cys Thr Val Val Val His
            325   330   335

Val Thr Asp Ile Asn Asp Asn Pro Pro Glu Leu Leu Met Ser Ser Leu
            340   345   350

Thr Ser Pro Ile Pro Glu Asn Ser Pro Glu Thr Val Val Ala Val Phe
        355   360   365

Arg Ile Arg Asp Arg Asp Ser Gly Asn Asn Ala Lys Met Val Cys Ser
    370   375   380

Ile Gln Asp His Leu Pro Phe Val Leu Lys Pro Ser Val Glu Asn Phe
385   390   395   400

Tyr Thr Leu Val Thr Glu Arg Ala Leu Asp Arg Glu Glu Arg Thr Glu
            405   410   415

Tyr Asn Ile Thr Ile Thr Val Thr Asp Leu Gly Thr Pro Arg Leu Lys
            420   425   430

Thr Gln His Asn Leu Thr Val Thr Val Ser Asp Val Asn Asp Asn Ala
        435   440   445

Pro Thr Phe Ser Gln Thr Thr Tyr Thr Leu Arg Val Arg Glu Asn Asn
    450   455   460

Ser Pro Ala Leu His Ile Gly Ser Val Ser Ala Thr Asp Arg Asp Ser
465   470   475   480

Gly Ala Asn Ala Gln Val Thr Tyr Ser Leu Leu Pro Pro His Asp Pro
            485   490   495

Gln Leu Pro Leu Gly Ser Leu Val Ser Ile Asn Ala Asp Asn Gly Gln
        500   505   510

Leu Phe Ala Leu Arg Ser Leu Asp Phe Glu Ala Leu Gln Ala Phe Glu
    515   520   525

Phe Arg Val Gly Ala Ala Asp Arg Gly Ser Pro Ala Leu Ser Ser Gln
    530   535   540

Ala Leu Val Arg Val Leu Val Ala Asp Ala Asn Asp Asn Ala Pro Phe
545   550   555   560

Val Leu Tyr Pro Leu Gln Asn Gly Ser Ala Pro Cys Thr Glu Leu Val
            565   570   575

Pro Arg Ala Ala Glu Ala Gly Tyr Leu Val Ala Lys Val Val Ala Val
        580   585   590

Asp Gly Asp Ser Gly Gln Asn Ala Trp Leu Ser Tyr Gln Leu Leu Lys
        595   600   605

Ala Thr Glu Pro Gly Leu Phe Gly Val Trp Ala His Asn Gly Glu Val
    610   615   620

Arg Thr Ala
625

<210> 126
<211> 51
<212> PRT
<213> Homo sapiens

<400> 126
Met Arg Ala Val His Pro Ala Leu Gly Leu Cys Leu Leu Pro Ala Pro
1   5   10   15
Ser Cys Gly Lys Val Leu Val Ala Gly Ala Leu Glu Gly Val Pro Ala
                20   25   30
Gly Val Ala Glu Ala Glu Ala Asn Ile Ala Gln Val Pro Pro Ile Ala
            35   40   45
Arg Gln Thr
        50

<210> 127
<211> 74
<212> PRT
<213> Homo sapiens

<400> 127
Met Phe Thr Gly Leu Leu Ile Tyr Leu Leu Val Ser Ser Ile Leu Ile
1   5   10   15
Ser Leu Ala Asp Arg Pro Phe Ser Ser Ile Arg Cys Leu Thr Phe Trp
                20   25   30
Val Gln Phe Ile Arg Leu Cys Tyr Ile Arg Asn Thr Ser Leu Leu Pro
            35   40   45
Met Thr Cys Val Ala Tyr Ile Phe Phe Leu Phe Tyr Phe Phe Thr Ile
        50   55   60
Gln Lys Phe Leu Val Lys Ile Ile Asn Phe
65   70

<210> 128
<211> 257
<212> PRT
<213> Homo sapiens

<400> 128
Met Ala Ser Lys Ile Gly Ser Arg Arg Trp Met Leu Gln Leu Ile Met
1   5   10   15
Gln Leu Gly Ser Val Leu Leu Thr Arg Cys Pro Phe Trp Gly Cys Phe
                20   25   30
Ser Gln Leu Met Leu Tyr Ala Glu Arg Ala Glu Ala Arg Arg Lys Pro
            35   40   45
Asp Ile Pro Val Pro Tyr Leu Tyr Phe Asp Met Gly Ala Ala Val Leu
    50   55   60
Cys Ala Ser Phe Met Ser Phe Gly Val Lys Arg Arg Trp Phe Ala Leu
65   70   75   80
Gly Ala Ala Leu Gln Leu Ala Ile Ser Thr Tyr Ala Ala Tyr Ile Gly
                85   90   95
Gly Tyr Val His Tyr Gly Asp Trp Leu Lys Val Arg Met Tyr Ser Arg
            100   105   110
Thr Val Ala Ile Ile Gly Gly Phe Leu Val Leu Ala Ser Gly Ala Gly
            115   120   125

Glu Leu Tyr Arg Arg Lys Pro Arg Ser Arg Ser Leu Gln Ser Thr Gly
    130   135   140

Gln Val Phe Leu Gly Ile Tyr Leu Ile Cys Val Ala Tyr Ser Leu Gln
145   150   155   160

His Ser Lys Glu Asp Arg Leu Ala Tyr Leu Asn His Leu Pro Gly Gly
                165   170   175

Glu Leu Met Ile Gln Leu Phe Phe Val Leu Tyr Gly Ile Leu Ala Leu
            180   185   190

Ala Phe Leu Ser Gly Tyr Tyr Val Thr Leu Ala Ala Gln Ile Leu Ala
        195   200   205

Val Leu Leu Pro Pro Val Met Leu Leu Ile Asp Gly Asn Val Ala Tyr
    210   215   220

Trp His Asn Thr Arg Arg Val Glu Phe Trp Asn Gln Met Lys Leu Leu
225   230   235   240

Gly Glu Ser Val Gly Ile Phe Gly Thr Ala Val Ile Leu Ala Thr Asp
            245   250   255

Gly

<210> 129
<211> 348
<212> PRT
<213> Homo sapiens

<400> 129
Met Lys Glu Asp Cys Leu Pro Ser Ser His Val Pro Ile Ser Asp Ser
  1   5   10   15

Lys Ser Ile Gln Lys Ser Glu Leu Leu Gly Leu Leu Lys Thr Tyr Asn
            20   25   30

Cys Tyr His Glu Gly Lys Ser Phe Gln Leu Arg His Arg Glu Glu Glu
        35   40   45

Gly Thr Leu Ile Ile Glu Gly Leu Leu Asn Ile Ala Trp Gly Leu Arg
    50   55   60

Arg Pro Ile Arg Leu Gln Met Gln Asp Asp Arg Glu Gln Val His Leu
65   70   75   80

Pro Ser Thr Ser Trp Met Pro Arg Arg Pro Ser Cys Pro Leu Gly Cys
            85   90   95

Trp Ser Leu Leu Leu Gly Leu Ser Ser Leu Ser Leu Pro Ala Ala Ile
        100   105   110

Ser Ala Leu Gln Leu Ser Val Phe Arg Lys Glu Pro Ser Pro Gln Asn
        115   120   125

Gly Asn Ile Thr Ala Gln Gly Pro Ser Ile Gln Pro Val His Lys Ala
    130   135   140

Glu Ser Ser Thr Asp Ser Ser Gly Pro Leu Glu Glu Ala Glu Glu Ala
145   150   155   160

Pro Gln Leu Met Arg Thr Lys Ser Asp Ala Ser Cys Met Ser Gln Arg

```
                    165                  170                  175
Arg Pro Lys Cys Arg Ala Pro Gly Glu Ala Gln Arg Ile Arg Arg His
            180                  185                  190
Arg Phe Ser Ile Asn Gly His Phe Tyr Asn His Lys Thr Ser Val Phe
            195                  200                  205
Thr Pro Ala Tyr Gly Ser Val Thr Asn Val Arg Val Asn Ser Thr Met
    210                  215                  220
Thr Thr Leu Gln Val Leu Thr Leu Leu Leu Asn Lys Phe Arg Val Glu
225                  230                  235                  240
Asp Gly Pro Ser Glu Phe Ala Leu Tyr Ile Val His Glu Ser Gly Glu
            245                  250                  255
Arg Thr Lys Leu Lys Asp Cys Glu Tyr Pro Leu Ile Ser Arg Ile Leu
            260                  265                  270
His Gly Pro Cys Glu Lys Ile Ala Arg Ile Phe Leu Met Glu Ala Asp
            275                  280                  285
Leu Gly Val Glu Val Pro His Glu Val Ala Gln Tyr Ile Lys Phe Glu
    290                  295                  300
Met Pro Val Leu Asp Ser Phe Val Glu Lys Leu Lys Glu Glu Glu Glu
305                  310                  315                  320
Arg Glu Ile Ile Lys Leu Thr Met Lys Phe Gln Ala Leu Arg Leu Thr
            325                  330                  335
Met Leu Gln Arg Leu Glu Gln Leu Val Glu Ala Lys
            340                  345


<210> 130
<211> 95
<212> PRT
<213> Homo sapiens

<400> 130
Met Ser Ala Trp Leu Val Ser Leu Cys Ala Trp Leu Ser Leu Leu Arg
  1               5                  10                  15
Ala Thr Val Thr Ser Gln Val Ser Ser Ser Pro Ala Pro Val Val Ala
            20                  25                  30
Ser Gly Thr Leu Ser Pro Cys His Pro Pro Gly Ser Pro Ala Ala Ser
            35                  40                  45
Ala Cys Leu Leu Ser Pro Gln Ser Pro Cys Arg Arg Ala Ser Lys Trp
    50                  55                  60
Arg Ser His Met Thr Gly Val Ala Pro Ser Asn Arg Gly Ser Ser Cys
65                  70                  75                  80
Glu Ser Ser Gly Ser Gln Gly Lys Pro Ser Gln Arg Ala Gly Ala
            85                  90                  95


<210> 131
<211> 60
<212> PRT
<213> Homo sapiens
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<400> 131
Met His Ile Pro Leu Trp Pro Asn Trp Leu Leu Phe Val Cys Lys Leu
1   5   10   15

Leu Phe Leu Ser His Pro Ile Leu Leu Ala Cys Val Lys Cys Lys Ser
            20   25   30

Gln Val Phe Pro Ala Gly Ser Asn Val Phe Leu Ser Leu Asn Gln Gly
            35   40   45

Pro Thr Gly Cys Leu Leu Leu Gln Ile Lys Phe Tyr
        50   55   60

<210> 132
<211> 267
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (172)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (175)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 132
Met Ser Glu Ile Arg Gly Lys Pro Ile Glu Ser Ser Cys Met Tyr Gly
1   5   10   15

Thr Cys Cys Leu Trp Gly Lys Thr Tyr Ser Ile Gly Phe Leu Arg Phe
            20   25   30

Cys Lys Gln Ala Thr Leu Gln Phe Cys Val Val Lys Pro Leu Met Ala
            35   40   45

Val Ser Thr Val Val Leu Gln Ala Phe Gly Lys Tyr Arg Asp Gly Asp
        50   55   60

Phe Asp Val Thr Ser Gly Tyr Leu Tyr Val Thr Ile Ile Tyr Asn Ile
65   70   75   80

Ser Val Ser Leu Ala Leu Tyr Ala Leu Phe Leu Phe Tyr Phe Ala Thr
            85   90   95

Arg Glu Leu Leu Ser Pro Tyr Ser Pro Val Leu Lys Phe Phe Met Val
            100   105   110

Lys Ser Val Ile Phe Leu Ser Phe Trp Gln Gly Met Leu Leu Ala Ile
        115   120   125

Leu Glu Lys Cys Gly Ala Ile Pro Lys Ile His Ser Ala Arg Val Ser
    130   135   140

Val Gly Glu Gly Thr Val Ala Ala Gly Tyr Gln Asp Phe Ile Ile Cys
145   150   155   160

Val Glu Met Phe Phe Ala Ala Leu Ala Leu Arg Xaa Ala Phe Xaa Tyr
            165   170   175

Lys Val Tyr Ala Asp Lys Arg Leu Asp Ala Gln Gly Arg Cys Ala Pro
        180   185   190

Met Lys Ser Ile Ser Ser Ser Leu Lys Glu Thr Met Asn Pro His Asp
        195   200   205

Ile Val Gln Asp Ala Ile His Asn Phe Ser Pro Ala Tyr Gln Gln Tyr
        210   215   220

Thr Gln Gln Ser Thr Leu Glu Pro Gly Pro Thr Trp Arg Gly Gly Ala
225   230   235   240

His Gly Leu Ser Arg Ser His Ser Leu Ser Gly Ala Arg Asp Asn Glu
                245   250   255

Lys Thr Leu Leu Leu Ser Ser Asp Asp Glu Phe
                260   265

<210> 133
<211> 115
<212> PRT
<213> Homo sapiens

<400> 133
Met Ser Asp Phe Ser Asn Leu Ser Leu Leu Phe Phe Leu Leu Val Ser
 1   5   10   15

Leu Ala Lys Gly Leu Ser Ile Leu Phe Ile Tyr Ser Glu Asn His Leu
                20   25   30

Leu Val Leu Phe Ile Phe Leu Ile Phe Lys Glu Thr Thr Arg Pro Ala
            35   40   45

Ala Phe Cys Val Ser Val Glu Ser Cys Tyr Gly Ser Gly Ser Cys Leu
        50   55   60

Ser Ser Leu Ser Val Glu Trp Pro Gly Gln Cys Met Trp Arg Leu Leu
65   70   75   80

Arg Leu Pro Phe Thr Arg Val Ala Leu Pro Leu Pro Val Trp His Phe
            85   90   95

His Val Thr Phe Leu Leu Lys Ser Trp Phe Thr Ala Lys Val Leu Ala
            100   105   110

Phe Ile Gln
        115

<210> 134
<211> 84
<212> PRT
<213> Homo sapiens

<400> 134
Met Gly Ile Trp Val Leu Ala Leu Trp Val Gly Cys Leu Cys Ser Ser
 1   5   10   15

Thr Gly Leu Pro Val Val Leu Thr Asn Val Glu Leu Gly Leu Arg Cys
            20   25   30

Glu Arg Thr Ala Met Ala Cys Cys Asn Gly Ser Ser Leu Val His Pro
        35   40   45

Arg Cys Ser Leu Ala Ser Val Cys Ile Ser Ala Pro Pro Ser Pro Ser
        50   55   60

Val Pro Trp Lys Lys Val Arg Pro Arg Gly Gln Ile Ala Ser Thr Val

65   70   75   80

Val Trp Thr His

<210> 135
<211> 96
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 135
Met Arg Val Thr Xaa Ala Thr Xaa Ala Leu Leu Leu Ala Xaa Ile Cys
 1   5   10   15

Ser Val Gln Leu Gly Asp Ala Cys Leu Asp Ile Asp Lys Leu Leu Ala
            20   25   30

Asn Val Val Phe Asp Val Ser Gln Asp Leu Leu Lys Glu Glu Leu Ala
        35   40   45

Arg Tyr Asn Pro Ser Pro Leu Thr Glu Glu Ser Phe Leu Asn Val Gln
    50   55   60

Gln Cys Phe Ala Asn Val Ser Val Thr Glu Arg Phe Ala His Ser Val
65   70   75   80

Val Ile Lys Lys Ile Leu Gln Ser Asn Asp Cys Ile Glu Ala Ala Phe
                85   90   95

<210> 136
<211> 43
<212> PRT
<213> Homo sapiens

<400> 136
Met Leu Val Ser Ser Pro Phe Ser Ser Pro Val Ser Phe Trp Ala Val
 1   5   10   15

Phe Val Cys Leu Leu Leu Leu Tyr Lys Ile Arg Thr Val Asn Tyr Leu
            20   25   30

Leu Cys Arg Ser Pro Ala Phe His Ser Ala Leu
            35   40

<210> 137

<211> 41
<212> PRT
<213> Homo sapiens

<400> 137
Met Glu Pro Cys Leu Ala Val Ala Leu Ser Val Tyr Ile Trp Leu Arg
 1   5   10   15

Ala Thr Ser Ala Lys Leu Leu Pro Asp Leu Asn Glu Ser Ala Glu Ile
            20   25   30

Ile Gly Pro Ser Ala Ala Glu Lys Lys
        35   40

<210> 138
<211> 52
<212> PRT
<213> Homo sapiens

<400> 138
Met Lys Cys Phe Phe Leu Phe Val Val Ile Leu Ile Ile Met Lys Ser
 1   5   10   15

Asn Leu Ser Asp Ile Ile Ile Ala Thr Tyr Thr Tyr Cys Ile Pro Asp
            20   25   30

Tyr Phe Phe His Thr Phe Ile Phe Asn Leu Ser Val Tyr Leu Asn Ser
        35   40   45

Lys Phe Ile Ser
     50

<210> 139
<211> 43
<212> PRT
<213> Homo sapiens

<400> 139
Met Ile Val Tyr Tyr Leu Ala Phe Phe Gly Leu Leu Asp Leu Cys Leu
 1   5   10   15

Gly Glu Gly Asn Phe Ser Ala Arg Glu Ala Val Trp Val Ile Cys Phe
            20   25   30

Phe Ala Arg Asp Tyr Ser Pro Lys Tyr Tyr Arg
        35   40

<210> 140
<211> 48
<212> PRT
<213> Homo sapiens

<400> 140
Met Ile Leu Gly Leu Leu Asn Leu Leu Arg Ile Val Val Phe Leu Ile
 1   5   10   15

Ala Trp Ser Ile Leu Glu Tyr Val Thr His Gly Asp Glu Lys Asp Ile
            20   25   30

Tyr Thr Met Leu Val Ser Asp Glu Glu Phe His Ile Cys Leu Leu Glu
        35   40   45

```
<210> 141
<211> 410
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (168)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 141
Met Asn Pro Ala Val Arg Gln Arg Cys Leu Leu Phe Cys Phe Gln Gln
 1               5                  10                  15

Lys Leu Ile Leu Ser His Phe Phe Leu Leu Gln Val Pro Gln Trp Cys
             20                  25                  30

Ala Glu Tyr Cys Leu Ser Ile His Tyr Gln His Gly Gly Val Ile Cys
         35                  40                  45

Thr Gln Val His Lys Gln Thr Val Val Gln Leu Ala Leu Arg Val Ala
     50                  55                  60

Asp Glu Met Asp Val Asn Ile Gly His Glu Val Gly Tyr Xaa Ile Pro
 65                  70                  75                  80

Phe Glu Asn Cys Cys Thr Asn Glu Thr Ile Leu Arg Tyr Cys Thr Asp
             85                  90                  95

Asp Met Leu Gln Arg Glu Met Met Ser Asn Pro Phe Leu Gly Ser Tyr
             100                 105                 110

Gly Val Ile Ile Leu Asp Asp Ile His Glu Arg Ser Ile Ala Thr Asp
             115                 120                 125

Val Leu Leu Gly Leu Leu Lys Asp Val Leu Leu Ala Arg Pro Glu Leu
     130                 135                 140

Lys Leu Ile Ile Asn Ser Ser Pro His Leu Ile Ser Lys Leu Asn Ser
145                 150                 155                 160

Tyr Tyr Gly Asn Val Pro Val Xaa Glu Val Lys Asn Lys His Pro Val
             165                 170                 175

Glu Val Val Tyr Leu Ser Glu Ala Gln Lys Asp Ser Phe Glu Ser Ile
             180                 185                 190

Leu Arg Leu Ile Phe Glu Ile His His Ser Gly Glu Lys Gly Asp Ile
         195                 200                 205

Val Val Phe Leu Ala Cys Glu Gln Asp Ile Glu Lys Val Cys Glu Thr
     210                 215                 220

Val Tyr Gln Gly Ser Asn Leu Asn Pro Asp Leu Gly Glu Leu Val Val
225                 230                 235                 240

Val Pro Leu Tyr Pro Lys Glu Lys Cys Ser Leu Phe Lys Pro Leu Asp
             245                 250                 255
```

Glu Thr Glu Lys Arg Cys Gln Val Tyr Gln Arg Arg Val Val Leu Thr
            260   265   270

Thr Ser Ser Gly Glu Phe Leu Ile Trp Ser Asn Ser Val Arg Phe Val
            275   280   285

Ile Asp Val Gly Val Glu Arg Arg Lys Val Tyr Asn Pro Arg Ile Arg
        290   295   300

Ala Asn Ser Leu Val Met Gln Pro Ile Ser Gln Ser Gln Ala Glu Ile
305   310   315   320

Arg Lys Gln Ile Leu Gly Ser Ser Ser Gly Lys Phe Phe Cys Leu
            325   330   335

Tyr Thr Glu Glu Phe Ala Ser Lys Asp Met Thr Pro Leu Lys Pro Ala
            340   345   350

Glu Met Gln Glu Ala Asn Leu Thr Ser Met Val Leu Phe Met Lys Arg
            355   360   365

Ile Asp Ile Ala Gly Leu Gly His Cys Asp Phe Met Asn Arg Pro Gly
        370   375   380

Ser Leu Met Leu Pro Cys Gln Pro Gly Ile Arg Leu Arg Phe Thr Phe
385   390   395   400

Ser Cys Pro Phe Ser Val Leu Ser Ser His
            405   410

<210> 142
<211> 64
<212> PRT
<213> Homo sapiens

<400> 142
Met Leu Arg Phe Leu Gly Asn Gln Met Tyr Ala Leu Tyr Thr Trp Leu
  1   5   10   15

Leu Leu Gln Ser Pro Val Cys Ser Ala Val Leu Val Thr Ser Ala Leu
            20   25   30

Leu Tyr Pro Ser Leu Leu Thr Leu Arg Pro Ser Gln Ala His Ala Ala
        35   40   45

Cys Ile Tyr Leu Pro Ser Val Ser Leu Val Ser Leu Ser Asp Pro Phe
    50   55   60

<210> 143
<211> 43
<212> PRT
<213> Homo sapiens

<400> 143
Met Asn Leu Ile Phe Arg Leu Pro Cys Ile Leu Leu Thr Cys Ile Tyr
  1   5   10   15

Val Gln Gln Cys Val Cys Lys Tyr Ile Gly Thr Phe Leu Asn Arg Val
            20   25   30

Cys Ala Met Cys Lys Gly Leu Leu Thr Val Lys
        35   40

<210> 144
<211> 58
<212> PRT
<213> Homo sapiens

<400> 144
Met Val Ser Phe Gly Phe Trp Phe Leu Cys Leu Phe Phe Gly Val Trp
  1   5   10   15

Lys Asn Met His Phe Tyr Arg Ala Arg Lys Leu Val Ser Arg Lys Gly
                20   25   30

Ser Pro Glu Lys Ala Ala Asp Gly Pro Cys Pro Cys Trp Val Phe Leu
        35   40   45

Phe Phe Gly Thr Val Arg Gly Asn Gly Phe
      50   55

<210> 145
<211> 103
<212> PRT
<213> Homo sapiens

<400> 145
Met Ala His Ile Gly Ala Cys Val Ser Phe Val Phe Phe Leu Leu Gln
  1   5   10   15

Gly Ala Val Ser Val Trp Thr Phe Cys Phe Arg Glu Leu Glu Arg Arg
                20   25   30

Val Ser Ala Glu Gly Gly Glu Gln Gly Gln Arg Pro His Trp Pro Pro
        35   40   45

Pro Ala Ser Gln Ser Glu Thr Leu Cys Leu Val Thr Lys Val Pro Pro
      50   55   60

Lys Cys Ser Ser Phe Trp Val Ile Gln Ala Lys Tyr Leu Gly Phe Pro
 65   70   75   80

Leu Ser Ser Phe Pro Ser Lys Pro Gln Leu Ser Phe Lys Ile Gly Asp
                85   90   95

Ile Ser His Pro Leu Pro Leu
            100

<210> 146
<211> 44
<212> PRT
<213> Homo sapiens

<400> 146
Met Met Pro Leu Lys Leu His Ala Lys Cys Leu Tyr Leu Leu Lys Cys
  1   5   10   15

Val Phe Phe Val Gly Val Gly Gly Met Thr Phe Tyr Gln Ile Leu Thr
                20   25   30

Gly Phe Lys Ile Gln Lys Ser Leu Asp Leu Val Gly
        35   40

<210> 147
<211> 87
<212> PRT
<213> Homo sapiens

<400> 147
Met Asp Leu Thr Val Glu Gly Phe Gln Ser Trp Met Trp Arg Gly Leu
1   5   10   15

Thr Phe Leu Leu Pro Phe Leu Phe Gly His Phe Trp Gln Leu Phe
            20   25   30

Asn Ala Leu Thr Leu Phe Asn Leu Ala Gln Asp Pro Gln Cys Lys Glu
        35   40   45

Trp Gln Val Leu Met Cys Gly Phe Pro Phe Leu Leu Leu Phe Leu Gly
    50   55   60

Asn Phe Phe Thr Thr Leu Arg Val Val His His Lys Phe His Ser Gln
65   70   75   80

Arg His Gly Ser Lys Lys Asp
            85

<210> 148
<211> 65
<212> PRT
<213> Homo sapiens

<400> 148
Met Ala Ser Pro Ser Ile Ile Leu Leu Leu Ile Phe Phe Phe Phe
1   5   10   15

Phe Phe Ser Val Cys Ser Val Ser Gln Tyr Met Phe Glu Asn Glu Cys
            20   25   30

Glu Ser Met Ser Arg Arg Arg Gly Arg Gly Leu Gly Arg Ser Arg Leu
        35   40   45

Lys Val Glu Gln Gly Pro Asp Ala Asp Leu His Pro Arg Thr Leu Gly
    50   55   60

Ser
65

<210> 149
<211> 87
<212> PRT
<213> Homo sapiens

<400> 149
Met Thr Ala Trp Ile Leu Leu Pro Val Ser Leu Ser Ala Phe Ser Ile
1   5   10   15

Thr Gly Ile Trp Thr Val Tyr Ala Met Ala Val Met Asn His His Val
            20   25   30

Cys Pro Val Glu Asn Trp Ser Tyr Asn Glu Ser Cys Pro Pro Asp Pro
        35   40   45

Ala Glu Gln Gly Gly Pro Lys Thr Cys Cys Thr Leu Asp Asp Val Pro
    50   55   60

```
Leu Ile Ser Gly Pro Asp Leu Pro Pro Ala Leu Arg Ala Ala Pro Gly
 65              70          75                      80

Ala Glu Ser Ala Leu Leu Gly
              85
```

<210> 150
<211> 56
<212> PRT
<213> Homo sapiens

<400> 150
```
Met Lys Ile Pro Leu His Val Val Phe Leu Leu Ile Ser Leu Thr Phe
 1           5               10              15

Leu Phe Thr Thr Leu Pro Thr Ala His Ser Ala Pro Ser Ser Pro Ala
            20              25              30

Ser Leu His Ile Leu Arg Leu Arg Gly His Leu Met Cys Val Phe Pro
        35              40              45

Leu Lys Met Met Pro Thr Leu Ile
    50              55
```

<210> 151
<211> 45
<212> PRT
<213> Homo sapiens

<400> 151
```
Met Val Gln Trp Lys Asn Trp Pro Glu Ser Leu Glu Val Trp Val Leu
 1           5               10              15

Val Leu Ala Val Pro Leu Thr His Cys Asp Leu Gly Ile Leu Cys Cys
            20              25              30

Glu Asp Ile Ser Gln Val Leu His Val Ser Gln Gln Ile
        35              40              45
```

<210> 152
<211> 52
<212> PRT
<213> Homo sapiens

<400> 152
```
Met Asp Ser Cys Leu Phe Leu Arg Asp Phe Cys Trp Lys Met Arg Met
 1           5               10              15

Leu Thr Ile Leu Pro Leu Gly Thr Leu Phe Pro Leu Leu Thr Leu Leu
            20              25              30

Leu Leu Pro Leu Glu Val Pro Ser Val Ser Cys Gly Val Pro Phe Ala
        35              40              45

Val Trp Asp Leu
    50
```

<210> 153
<211> 80
<212> PRT
<213> Homo sapiens

<400> 153
Met Ala Leu Trp Val Thr Cys Ile Leu Ser Leu Cys Thr Trp Phe Ser
1   5   10   15

Cys Leu Tyr Gly Ala Asp Ser Leu Ala Asn Lys Cys Leu Ser Ala Gly
            20   25   30

Ala Thr Arg Lys Ala Phe Pro Phe Cys Val Leu Phe Arg Asp Leu Glu
            35   40   45

Val Gly Leu Gly Phe Glu Gly Phe Val Thr His Leu Ala Cys Lys Leu
    50   55   60

Phe Cys Tyr Cys Glu Leu Ser Asp Ser Ala Leu Ser Leu Gly His Glu
65   70   75   80

<210> 154
<211> 64
<212> PRT
<213> Homo sapiens

<400> 154
Met Asn Ile Pro Trp Leu Tyr Phe Val Asn Ser Phe Leu Ile Ala Thr
1   5   10   15

Val Tyr Trp Phe Asn Cys His Lys Leu Asn Leu Lys Asp Ile Gly Leu
            20   25   30

Pro Leu Asp Pro Phe Val Asn Trp Lys Cys Cys Phe Ile Pro Leu Thr
            35   40   45

Ile Pro Asn Leu Glu Gln Ile Glu Lys Pro Ile Ser Ile Met Ile Cys
    50   55   60

<210> 155
<211> 51
<212> PRT
<213> Homo sapiens

<400> 155
Met Ser Phe Asp Ala Glu Lys Phe Leu Ile Leu Lys Phe Ile Leu Gln
1   5   10   15

Phe Phe Leu Leu Leu Tyr Val Leu Phe Leu Val Leu Tyr Leu Arg Ile
            20   25   30

Cys Cys His Thr Gln Gly His Glu Asp Leu Pro Val Cys Tyr Leu Leu
            35   40   45

Arg Val Leu
        50

<210> 156
<211> 78
<212> PRT
<213> Homo sapiens

<400> 156
Met Ala Lys Arg Ser Ser Ser Leu Ser Ser Ser Lys Arg Leu Val Phe
1   5   10   15

Phe Thr Ala Leu Ala Ser Trp Leu Trp Arg Val Pro Glu Ser Leu Gly
            20   25   30

Ser Pro Leu Asp Leu Leu Ser Asp Ala Lys Trp Val Cys Glu Ala Gly
            35   40   45

Ile Phe His Trp Ser Ser Ser Ser Leu Leu Asn Asn Arg Ala Asp Ala
        50   55   60

Phe Phe Leu Glu Ser Ser Glu Ala Phe Ala Phe Ser Ser Leu
65   70   75

<210> 157
<211> 47
<212> PRT
<213> Homo sapiens

<400> 157
Met Lys Met Asn Lys Leu Phe Trp Ile Arg Ile Leu Lys Leu Leu Leu
1   5   10   15

Gln Ala Leu Ser Gln Cys Lys Leu Leu Ile Lys Gly Gln Val Ala Val
            20   25   30

Pro Lys Asp Leu Ile Met Asp Ser Glu Ile Ala Lys Val Thr Asn
            35   40   45

<210> 158
<211> 53
<212> PRT
<213> Homo sapiens

<400> 158
Met Asn Leu Leu His Cys Leu Tyr Met Ile Asn Ile Ile Ile Tyr Ile
1   5   10   15

Phe Cys Ile Lys Leu Ile Trp Leu His Leu Ser Cys Ile Leu Ser His
            20   25   30

Ile Ser Phe Ile Ser Ser Met Asp Met Ser Arg Ser Leu Tyr Trp Ser
            35   40   45

Pro Val Cys Ala Val
        50

<210> 159
<211> 262
<212> PRT
<213> Homo sapiens

<400> 159
Met Arg Leu Arg Leu Arg Leu Leu Ala Leu Leu Leu Leu Leu Leu Ala
1   5   10   15

Pro Pro Ala Arg Ala Pro Lys Pro Ser Ala Gln Asp Val Ser Leu Gly
            20   25   30

Val Asp Trp Leu Thr Arg Tyr Gly Tyr Leu Pro Pro Pro His Pro Ala
            35   40   45

```
Gln Ala Gln Leu Gln Ser Pro Glu Lys Leu Arg Asp Ala Ile Lys Val
    50              55              60
Met Gln Arg Phe Ala Gly Leu Pro Glu Thr Gly Arg Met Asp Pro Gly
65              70              75              80
Thr Val Ala Thr Met Arg Lys Pro Arg Cys Ser Leu Pro Asp Val Leu
            85              90              95
Gly Val Ala Gly Leu Val Arg Arg Gly Arg Arg Tyr Ala Leu Ser Gly
        100             105             110
Ser Val Trp Lys Lys Arg Thr Leu Thr Trp Arg Val Arg Ser Phe Pro
        115             120             125
Gln Ser Ser Gln Leu Ser Gln Glu Thr Val Arg Val Leu Met Ser Tyr
    130             135             140
Ala Leu Met Ala Trp Gly Met Glu Ser Gly Leu Thr Phe His Glu Val
145             150             155             160
Asp Ser Pro Gln Gly Gln Glu Pro Asp Ile Leu Ile Asp Phe Ala Arg
            165             170             175
Ala Phe His Gln Asp Ser Tyr Pro Phe Asp Gly Leu Gly Gly Thr Leu
        180             185             190
Ala His Ala Phe Phe Pro Gly Glu His Pro Ile Ser Gly Asp Thr His
        195             200             205
Phe Asp Asp Glu Glu Thr Trp Thr Phe Gly Ser Lys Asp Gly Glu Gly
    210             215             220
Thr Asp Leu Phe Ala Val Ala Val His Glu Phe Gly His Ala Leu Gly
225             230             235             240
Leu Gly His Ser Ser Ala Pro Asn Ser Ile Met Arg Pro Phe Tyr Gln
            245         '       250             255
Gly Pro Val Gly Arg Pro
            260
```

```
<210> 160
<211> 95
<212> PRT
<213> Homo sapiens

<400> 160
Met Thr Leu Ala Leu Ala Tyr Leu Leu Ala Leu Pro Gln Val Leu Asp
1               5               10              15
Ala Asn Arg Cys Phe Glu Lys Gln Ser Pro Ser Ala Leu Ser Leu Gln
            20              25              30
Leu Ala Ala Tyr Tyr Tyr Ser Leu Gln Ile Tyr Ala Arg Leu Ala Pro
            35              40              45
Cys Phe Arg Asp Lys Cys His Pro Leu Tyr Arg Glu Leu Ile Thr Tyr
        50              55              60
Val Ser Arg Met Tyr Ser Lys Trp Gln Ala Ala Leu Gly Phe Pro Val
65              70              75              80
Phe Asp Lys Val Ala Ser Pro Gly Ile Ser Trp Arg Thr Val Val
```

85 90 95

<210> 161
<211> 120
<212> PRT
<213> Homo sapiens

<400> 161
Met Leu Asn Leu Gly Ser Trp Pro Gly Leu Val Ala Ala Ser Leu Phe
1   5   10   15

Leu Leu Lys Gly Val Phe Ser Leu Phe Val Gln Leu Leu Lys Asn Pro
            20   25   30

Leu Gln His Pro Arg Asn Arg Ala Thr His Leu Leu Ala Thr Pro Gly
        35   40   45

Ala Arg Val Leu Gln Glu His Leu Ser Ile His Pro Val Cys His Gln
    50   55   60

Ser His Pro Pro Glu Ala Pro Leu Leu Pro Pro Ser Thr Arg Ala Ser
65   70   75   80

Leu Gln Ala Ser Pro Pro Pro Pro Ser Ser Gln His Pro Gly Gly
            85   90   95

Thr Pro Ala Ala Cys Leu Gln Ser Lys Leu Pro Ile Thr His Arg Arg
            100   105   110

Ser Pro Leu Arg Arg Pro Arg His
        115   120

<210> 162
<211> 121
<212> PRT
<213> Homo sapiens

<400> 162
Met Cys Phe Leu Met Ile Phe Thr Phe Leu Val Cys Trp Met Pro Tyr
1   5   10   15

Ile Val Ile Cys Phe Leu Val Val Asn Gly His Gly His Leu Val Thr
            20   25   30

Pro Thr Ile Ser Ile Val Ser Tyr Leu Phe Ala Lys Ser Asn Thr Val
        35   40   45

Tyr Asn Pro Val Ile Tyr Val Phe Met Ile Arg Lys Phe Arg Arg Ser
    50   55   60

Leu Leu Gln Leu Leu Cys Leu Arg Leu Leu Arg Cys Gln Arg Pro Ala
65   70   75   80

Lys Asp Leu Pro Ala Ala Gly Ser Glu Met Gln Ile Arg Pro Ile Val
            85   90   95

Met Ser Gln Lys Asp Gly Asp Arg Pro Lys Lys Ser Asp Phe Gln Leu
            100   105   110

Phe Phe His His Phe Tyr His His Gln
        115   120

<210> 163

```
<211> 310
<212> PRT
<213> Homo sapiens

<400> 163
Met Ala Leu Arg Arg Pro Pro Arg Leu Arg Leu Cys Ala Arg Leu Pro
 1               5                  10                  15

Asp Phe Phe Leu Leu Leu Leu Phe Arg Gly Cys Leu Ile Gly Ala Val
                20                  25                  30

Asn Leu Lys Ser Ser Asn Arg Thr Pro Val Val Gln Glu Phe Glu Ser
            35                  40                  45

Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr Ser Asp Pro Arg
    50                  55                  60

Ile Glu Trp Lys Lys Ile Gln Asp Glu Gln Thr Thr Tyr Val Phe Phe
65                  70                  75                  80

Asp Asn Lys Ile Gln Gly Asp Leu Ala Gly Arg Ala Glu Ile Leu Gly
                85                  90                  95

Lys Thr Ser Leu Lys Ile Trp Asn Val Thr Arg Arg Asp Ser Ala Leu
            100                 105                 110

Tyr Arg Cys Glu Val Val Ala Arg Asn Asp Arg Lys Glu Ile Asp Glu
        115                 120                 125

Ile Val Ile Glu Leu Thr Val Gln Val Lys Pro Val Thr Pro Val Cys
    130                 135                 140

Arg Val Pro Lys Ala Val Pro Val Gly Lys Met Ala Thr Leu His Cys
145                 150                 155                 160

Gln Glu Ser Glu Gly His Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn
                165                 170                 175

Asp Val Pro Leu Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Arg Asn
                180                 185                 190

Ser Ser Phe His Leu Asn Ser Glu Thr Gly Thr Leu Val Phe Thr Ala
        195                 200                 205

Val His Lys Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp
    210                 215                 220

Ala Gly Ser Ala Arg Cys Glu Glu Gln Glu Met Glu Val Tyr Asp Leu
225                 230                 235                 240

Asn Ile Gly Gly Ile Ile Gly Gly Val Leu Val Val Leu Ala Val Leu
                245                 250                 255

Ala Leu Ile Thr Leu Gly Ile Cys Cys Ala Tyr Arg Arg Gly Tyr Phe
            260                 265                 270

Ile Asn Asn Lys Gln Asp Gly Glu Ser Tyr Lys Asn Pro Gly Lys Pro
            275                 280                 285

Asp Gly Val Asn Tyr Ile Arg Thr Asp Glu Glu Gly Asp Phe Arg His
    290                 295                 300

Lys Ser Ser Phe Val Ile
305                 310
```

<210> 164
<211> 310
<212> PRT
<213> Homo sapiens

<400> 164

```
Met Ala Leu Arg Arg Pro Pro Arg Leu Arg Leu Cys Ala Arg Leu Pro
1               5                   10                  15

Asp Phe Phe Leu Leu Leu Leu Phe Arg Gly Cys Leu Ile Gly Ala Val
            20                  25                  30

Asn Leu Lys Ser Ser Asn Arg Thr Pro Val Val Gln Glu Phe Glu Ser
        35                  40                  45

Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr Ser Asp Pro Arg
    50                  55                  60

Ile Glu Trp Lys Lys Ile Gln Asp Glu Gln Thr Thr Tyr Val Phe Phe
65                  70                  75                  80

Asp Asn Lys Ile Gln Gly Asp Leu Ala Gly Arg Ala Glu Ile Leu Gly
                85                  90                  95

Lys Thr Ser Leu Lys Ile Trp Asn Val Thr Arg Arg Asp Ser Ala Leu
            100                 105                 110

Tyr Arg Cys Glu Val Val Ala Arg Asn Asp Arg Lys Glu Ile Asp Glu
        115                 120                 125

Ile Val Ile Glu Leu Thr Val Gln Val Lys Pro Val Thr Pro Val Cys
    130                 135                 140

Arg Val Pro Lys Ala Val Pro Val Gly Lys Met Ala Thr Leu His Cys
145                 150                 155                 160

Gln Glu Ser Glu Gly His Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn
                165                 170                 175

Asp Val Pro Leu Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Arg Asn
            180                 185                 190

Ser Ser Phe His Leu Asn Ser Glu Thr Gly Thr Leu Val Phe Thr Ala
        195                 200                 205

Val His Lys Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp
    210                 215                 220

Ala Gly Ser Ala Arg Cys Glu Glu Gln Glu Met Glu Val Tyr Asp Leu
225                 230                 235                 240

Asn Ile Gly Gly Ile Ile Gly Gly Val Leu Val Val Leu Ala Val Leu
                245                 250                 255

Ala Leu Ile Thr Leu Gly Ile Cys Cys Ala Tyr Arg Arg Gly Tyr Phe
            260                 265                 270

Ile Asn Asn Lys Gln Asp Gly Glu Ser Tyr Lys Asn Pro Gly Lys Pro
        275                 280                 285

Asp Gly Val Asn Tyr Ile Arg Thr Asp Glu Glu Gly Asp Phe Arg His
    290                 295                 300

Lys Ser Ser Phe Val Ile
305                 310
```

```
<210> 165
<211> 170
<212> PRT
<213> Homo sapiens

<400> 165
Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg
  1               5                  10                  15

Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Asp Phe Asp
             20                  25                  30

Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val Gln Cys
         35                  40                  45

Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu Ser Ile
     50                  55                  60

Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val Leu Thr
 65                  70                  75                  80

Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg His Gln
                 85                  90                  95

Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr Ser Gly
            100                 105                 110

Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro Leu Gln
            115                 120                 125

Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala Ile Leu
    130                 135                 140

Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala Pro His
145                 150                 155                 160

Ala Val His Pro Thr Gly Thr Lys Ala Leu
                165                 170


<210> 166
<211> 114
<212> PRT
<213> Homo sapiens

<400> 166
Met Val Thr Arg Ala Gly Ala Gly Thr Ala Val Ala Gly Ala Val Val
  1               5                  10                  15

Val Ala Leu Leu Ser Ala Ala Leu Ala Leu Tyr Gly Pro Pro Leu Asp
             20                  25                  30

Ala Val Leu Glu Arg Ala Phe Ser Leu Arg Lys Ala His Ser Ile Lys
         35                  40                  45

Asp Met Glu Asn Thr Leu Gln Leu Val Arg Asn Ile Ile Pro Pro Leu
         50                  55                  60

Ser Ser Thr Lys His Lys Gly Gln Asp Gly Arg Ile Gly Val Val Gly
 65                  70                  75                  80

Gly Cys Gln Glu Tyr Thr Gly Ala Pro Tyr Phe Ala Glu Ser Gln Leu
                 85                  90                  95

Ser Lys Trp Ala Gln Thr Cys Pro Thr Cys Ser Val Pro Val Arg Pro
```

100   105   110

His Leu

<210> 167
<211> 114
<212> PRT
<213> Homo sapiens

<400> 167
Met Val Thr Arg Ala Gly Ala Gly Thr Ala Val Ala Gly Ala Val Val
  1   5   10   15

Val Ala Leu Leu Ser Ala Ala Leu Ala Leu Tyr Gly Pro Pro Leu Asp
             20   25   30

Ala Val Leu Glu Arg Ala Phe Ser Leu Arg Lys Ala His Ser Ile Lys
         35   40   45

Asp Met Glu Asn Thr Leu Gln Leu Val Arg Asn Ile Ile Pro Pro Leu
     50   55   60

Ser Ser Thr Lys His Lys Gly Gln Asp Gly Arg Ile Gly Val Val Gly
65   70   75   80

Gly Cys Gln Glu Tyr Thr Gly Ala Pro Tyr Phe Ala Glu Ser Gln Leu
                 85   90   95

Ser Lys Trp Ala Gln Thr Cys Pro Thr Cys Ser Val Pro Val Arg Pro
            100   105   110

His Leu

<210> 168
<211> 56
<212> PRT
<213> Homo sapiens

<400> 168
Met Ala Arg Ala Cys Val Phe Gln Leu Ser Leu Trp Arg Lys Leu Pro
  1   5   10   15

Val Gly Ile Asn Leu Ser Pro Ala Ile Leu Ser Leu Ser Leu Gly Cys
             20   25   30

Leu Gly Leu Gly Phe Leu Leu Leu Leu Glu Arg Met Thr Thr Asp Ser
         35   40   45

Gly Ile Arg Gln Arg Arg Gln Thr
     50   55

<210> 169
<211> 51
<212> PRT
<213> Homo sapiens

<400> 169
Met Arg Ala Val His Pro Ala Leu Gly Leu Cys Leu Leu Pro Ala Pro
  1   5   10   15

Ser Cys Gly Lys Val Leu Val Ala Gly Ala Leu Glu Gly Val Pro Ala

```
                20                       25                       30
Gly Val Ala Glu Ala Glu Ala Asn Ile Ala Gln Val Pro Pro Ile Ala
            35                  40                  45

Arg Gln Thr
        50


<210> 170
<211> 120
<212> PRT
<213> Homo sapiens

<400> 170
Met Leu Pro Ala Leu Arg Gly Leu Leu Phe Val Thr Trp Val Phe Pro
 1               5                  10                  15

Leu Glu Asp Gln Glu Ala Ala Ala Phe Pro Gly Glu Val Asp Pro Pro
            20                  25                  30

Ser Pro Phe Gly Pro Cys Thr Ala Glu Gly Pro Ala Ala Leu Pro Ala
            35                  40                  45

Arg Val Trp Ser Val Lys Gln Gly Leu Arg Pro Phe Ser Cys Ser Asp
    50                  55                  60

Ala Pro Gln Gly Asp Ser Arg Glu Leu Ala Lys Pro Pro Gly Leu Pro
65                  70                  75                  80

Pro Val Arg Gly Ala Leu Val Thr Trp Pro Pro Pro Gln Pro Thr Gly
                85                  90                  95

Leu Ser Arg Leu Arg Cys His Pro His Gly Thr Gly Gly Asn His Ser
            100                 105                 110

Ile Arg Cys Arg Arg Cys Arg Pro
            115                 120


<210> 171
<211> 263
<212> PRT
<213> Homo sapiens

<400> 171
Met Pro Arg Arg Pro Ser Cys Pro Leu Gly Cys Trp Ser Leu Leu Leu
 1               5                  10                  15

Gly Leu Ser Ser Leu Ser Leu Pro Ala Ala Ile Ser Ala Leu Gln Leu
            20                  25                  30

Ser Val Phe Arg Lys Glu Pro Ser Pro Gln Asn Gly Asn Ile Thr Ala
            35                  40                  45

Gln Gly Pro Ser Ile Gln Pro Val His Lys Ala Glu Ser Ser Thr Asp
    50                  55                  60

Ser Ser Gly Pro Leu Glu Glu Ala Glu Glu Ala Pro Gln Leu Met Arg
65                  70                  75                  80

Thr Lys Ser Asp Ala Ser Cys Met Ser Gln Arg Arg Pro Lys Cys Arg
                85                  90                  95

Ala Pro Gly Glu Ala Gln Arg Ile Arg Arg His Arg Phe Ser Ile Asn
            100                 105                 110
```

```
Gly His Phe Tyr Asn His Lys Thr Ser Val Phe Thr Pro Ala Tyr Gly
        115             120             125

Ser Val Thr Asn Val Arg Val Asn Ser Thr Met Thr Thr Leu Gln Val
    130             135             140

Leu Thr Leu Leu Leu Asn Lys Phe Arg Val Glu Asp Gly Pro Ser Glu
145             150             155             160

Phe Ala Leu Tyr Ile Val His Glu Ser Gly Glu Arg Thr Lys Leu Lys
            165             170             175

Asp Cys Glu Tyr Pro Leu Ile Ser Arg Ile Leu His Gly Pro Cys Glu
        180             185             190

Lys Ile Ala Arg Ile Phe Leu Met Glu Ala Asp Leu Gly Val Glu Val
        195             200             205

Pro His Glu Val Ala Gln Tyr Ile Lys Phe Glu Met Pro Val Leu Asp
    210             215             220

Ser Phe Val Glu Lys Leu Lys Glu Glu Glu Glu Arg Glu Ile Ile Lys
225             230             235             240

Leu Thr Met Lys Phe Gln Ala Leu Arg Leu Thr Met Leu Gln Arg Leu
            245             250             255

Glu Gln Leu Val Glu Ala Lys
            260
```

```
<210> 172
<211> 157
<212> PRT
<213> Homo sapiens

<400> 172
```

```
Met Val Lys Ser Val Ile Phe Leu Ser Phe Trp Gln Gly Met Leu Leu
  1             5               10              15

Ala Ile Leu Glu Lys Cys Gly Ala Ile Pro Lys Ile His Ser Ala Arg
            20              25              30

Val Ser Val Gly Glu Gly Thr Val Ala Ala Gly Tyr His Asp Phe Ile
        35              40              45

Ile Cys Val Glu Met Phe Phe Ala Ala Leu Ala Leu Arg His Pro Phe
    50              55              60

Thr Tyr Asn Val Tyr Ala Asp Lys Arg Leu Asp Ala Gln Gly Arg Cys
65              70              75              80

Ala Pro Met Lys Ser Ile Ser Ser Ser Leu Lys Glu Thr Met Asn Pro
            85              90              95

His Asp Ile Val Gln Asp Ala Ile His Asn Phe Ser Pro Ala Tyr Gln
            100             105             110

Gln Tyr Thr Gln Gln Ser Thr Leu Glu Pro Gly Pro Thr Trp Arg Gly
        115             120             125

Gly Ala His Gly Leu Ser Arg Ser His Ser Leu Ser Gly Ala Arg Asp
    130             135             140

Asn Glu Lys Thr Leu Leu Leu Ser Ser Asp Asp Glu Phe
```

145   150   155

```
<210> 173
<211> 71
<212> PRT
<213> Homo sapiens

<400> 173
Glu Ser Ala Pro Pro Trp Leu Pro Ile Cys Pro Thr Arg Ser Leu Gly
 1               5                  10                  15

Leu Leu Val Gln Leu Leu Ala Leu Ala Gly Ser Cys Ser Ala Gly Pro
            20                  25                  30

Arg Ala Leu Gly Gln Ala Ser Gly Val Val Arg Thr Thr Lys Pro Leu
        35                  40                  45

Leu Ser Pro Ser Thr Pro Leu Asp Leu Gly Pro Pro Glu Pro Pro Ala
    50                  55                  60

Gly Trp Ala Tyr Thr Ser Ser
65                  70


<210> 174
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 174
Met Gly Ile Trp Val Leu Ala Leu Trp Val Gly Cys Leu Cys Phe Leu
 1               5                  10                  15

Tyr Arg Pro Ala Cys Gly Thr Asp Gln Cys Gly Ala Trp Ser Lys Val
            20                  25                  30
```

Arg Arg Thr Ala Met Ala Xaa Ala Thr Gly Ala Ala Xaa Ser Thr Pro
        35   40   45

Xaa Ala Xaa Trp Leu Leu Ser Val Ser His Thr Thr Leu Xaa Leu Xaa
    50   55   60

Ala Met Glu Lys Gly Glu Ala Gln Arg Ala Asn Cys Gln His Ser Cys
65   70   75   80

Val Asp Thr Leu Gly Pro Gln His Gln Pro
            85   90

<210> 175
<211> 155
<212> PRT
<213> Homo sapiens

<400> 175
Met Glu Asn Phe Ile Lys Val Gln Leu Arg Asp Gly Asp Ser Asn Cys
1   5   10   15

Glu Trp Ser Val Leu Tyr Val Ile Ile Ala Thr Phe Val Ile Val Val
            20   25   30

Ala Leu Gly Ile Leu Ser Trp Thr Val Ile Cys Cys Cys Lys Arg Gln
            35   40   45

Lys Gly Lys Pro Lys Arg Lys Ser Lys Tyr Lys Ile Leu Asp Ala Thr
    50   55   60

Asp Gln Glu Ser Leu Glu Leu Lys Pro Thr Ser Arg Ala Gly Lys Glu
65   70   75   80

Lys Arg Met Ser Leu Ser Gly Leu Asn Gln Ser Ser Trp Ile Leu Glu
            85   90   95

Met Lys Asn Gln Gln Glu Thr Pro Gly Ile Lys Gln Lys Gly Leu Leu
            100   105   110

Leu Ser Ser Ser Leu Met His Ser Glu Ser Glu Leu Asp Ser Asp Asp
            115   120   125

Ala Ile Phe Thr Trp Pro Asp Arg Glu Lys Gly Lys Leu Leu His Gly
    130   135   140

Gln Asn Gly Ser Val Pro Asn Gly Arg Pro Leu
145   150   155

<210> 176
<211> 102
<212> PRT
<213> Homo sapiens

<400> 176
Met Asn Pro Ala Val Arg Gln Arg Cys Leu Leu Phe Cys Phe Gln Gln
1   5   10   15

Lys Leu Ile Leu Ser His Phe Phe Leu Leu Gln Val Pro Gln Trp Cys
            20   25   30

Ala Glu Tyr Cys Leu Ser Ile His Tyr Gln His Gly Gly Val Ile Cys
            35   40   45

```
Thr Gln Val His Lys Gln Thr Val Val Gln Leu Ala Leu Arg Val Ala
    50              55              60

Asp Glu Met Asp Val Asn Ile Gly His Glu Val Gly Tyr Val Ile Pro
65              70              75              80

Phe Glu Asn Cys Cys Thr Asn Glu Thr Ile Leu Arg Leu Val Cys Gly
            85              90              95

Val Gln Ser Ala Pro Cys
            100
```

```
<210> 177
<211> 58
<212> PRT
<213> Homo sapiens

<400> 177
Met Val Ser Phe Gly Phe Trp Phe Leu Cys Leu Phe Phe Gly Val Trp
    1           5               10              15

Lys Asn Met His Phe Tyr Arg Ala Arg Lys Leu Val Ser Arg Lys Gly
            20              25              30

Ser Pro Glu Lys Ala Ala Asp Gly Pro Cys Pro Cys Trp Val Phe Leu
        35              40              45

Phe Phe Gly Thr Val Arg Gly Asn Gly Phe
        50              55
```

```
<210> 178
<211> 45
<212> PRT
<213> Homo sapiens

<400> 178
Met Val Gln Trp Lys Asn Trp Pro Glu Ser Leu Glu Val Trp Val Leu
    1           5               10              15

Val Leu Ala Val Pro Leu Thr His Cys Asp Leu Gly Ile Leu Cys Cys
            20              25              30

Glu Asp Ile Ser Gln Val Leu His Val Ser Gln Gln Ile
        35              40              45
```

```
<210> 179
<211> 98
<212> PRT
<213> Homo sapiens

<400> 179
Met Val His Ile Asn Arg Ala Leu Lys Leu Ile Ile Arg Leu Phe Leu
    1           5               10              15

Val Glu Asp Leu Val Asp Ser Leu Lys Leu Ala Val Phe Met Trp Leu
            20              25              30

Met Thr Tyr Val Gly Ala Val Phe Asn Gly Ile Thr Leu Leu Ile Leu
        35              40              45

Ala Glu Leu Leu Ile Phe Ser Val Pro Ile Val Tyr Glu Lys Tyr Lys
    50              55              60
```

```
Thr Gln Ile Asp His Tyr Val Gly Ile Ala Arg Asp Gln Thr Lys Ser
 65              70              75                      80

Ile Val Glu Lys Ile Gln Ala Lys Leu Pro Gly Ile Ala Lys Lys Lys
                 85              90                  95

Ala Glu
```

```
<210> 180
<211> 392
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (251)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 180
Met Ala Pro Trp Pro Pro Lys Gly Leu Val Pro Ala Val Leu Trp Gly
 1               5              10                  15

Leu Ser Leu Phe Leu Asn Leu Pro Gly Pro Ile Trp Leu Gln Pro Ser
             20              25                  30

Pro Pro Pro Gln Ser Ser Pro Pro Gln Pro His Pro Cys His Thr
         35              40                  45

Cys Arg Gly Leu Val Asp Ser Phe Asn Lys Gly Leu Glu Arg Thr Ile
     50              55                  60

Arg Asp Asn Phe Gly Gly Asn Thr Ala Trp Glu Glu Glu Asn Leu
 65              70              75                      80

Ser Lys Tyr Lys Asp Ser Glu Thr Arg Leu Val Glu Val Leu Glu Gly
             85              90                  95

Val Cys Ser Lys Ser Asp Phe Glu Cys His Arg Leu Leu Glu Leu Ser
             100             105             110

Glu Glu Leu Val Glu Ser Trp Trp Phe His Lys Gln Gln Glu Ala Pro
         115             120             125

Asp Leu Phe Gln Trp Leu Cys Ser Asp Ser Leu Lys Leu Cys Cys Pro
     130             135             140

Ala Gly Thr Phe Gly Pro Ser Cys Leu Pro Cys Pro Gly Gly Thr Glu
145             150             155             160

Arg Pro Cys Gly Gly Tyr Gly Gln Cys Glu Gly Glu Gly Thr Arg Gly
             165             170             175

Gly Ser Gly His Cys Asp Cys Gln Ala Gly Tyr Gly Gly Glu Ala Cys
             180             185             190

Gly Gln Cys Gly Leu Gly Tyr Phe Glu Ala Glu Arg Asn Ala Ser His
         195             200             205

Leu Val Cys Ser Ala Cys Phe Gly Pro Cys Ala Arg Cys Ser Gly Pro
     210             215             220

Glu Glu Ser Asn Cys Leu Gln Cys Lys Lys Gly Trp Ala Leu His His
225             230             235             240
```

110

Leu Lys Cys Val Asp Cys Ala Lys Ala Cys Xaa Gly Cys Met Gly Ala
            245   250   255

Gly Pro Gly Arg Cys Lys Lys Cys Ser Pro Gly Tyr Gln Gln Val Gly
            260   265   270

Ser Lys Cys Leu Asp Val Asp Glu Cys Glu Thr Glu Val Cys Pro Gly
    275   280   285

Glu Asn Lys Gln Cys Glu Asn Thr Glu Gly Gly Tyr Arg Cys Ile Cys
    290   295   300

Ala Glu Gly Tyr Lys Gln Met Glu Gly Ile Cys Val Lys Glu Gln Ile
305   310   315   320

Pro Glu Ser Ala Gly Phe Phe Ser Glu Met Thr Glu Asp Glu Leu Val
            325   330   335

Val Leu Gln Gln Met Phe Phe Gly Ile Ile Ile Cys Ala Leu Ala Thr
            340   345   350

Leu Ala Ala Lys Gly Asp Leu Val Phe Thr Ala Ile Phe Ile Gly Ala
            355   360   365

Val Ala Ala Met Thr Gly Tyr Trp Leu Ser Glu Arg Ser Asp Arg Val
    370   375   380

Leu Glu Gly Phe Ile Lys Gly Arg
385   390

<210> 181
<211> 434
<212> PRT
<213> Homo sapiens

<400> 181
Met Ala Pro Glu Gly Leu Val Pro Ala Val Leu Trp Gly Leu Ser Leu
  1   5   10   15

Phe Leu Asn Leu Pro Gly Pro Ile Trp Leu Gln Pro Ser Pro Pro Pro
            20   25   30

Gln Ser Ser Pro Pro Pro Gln Pro His Pro Cys His Thr Cys Arg Gly
        35   40   45

Leu Val Asp Ser Phe Asn Lys Gly Leu Glu Arg Thr Ile Arg Asp Asn
    50   55   60

Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Glu Asn Leu Ser Lys Tyr
65   70   75   80

Lys Asp Ser Glu Thr Arg Leu Val Glu Val Leu Glu Gly Val Cys Ser
            85   90   95

Lys Ser Asp Phe Glu Cys His Arg Leu Leu Glu Leu Ser Glu Glu Leu
            100   105   110

Val Glu Ser Trp Trp Phe His Lys Gln Gln Glu Ala Pro Asp Leu Phe
    115   120   125

Gln Trp Leu Cys Ser Asp Ser Leu Lys Leu Cys Cys Pro Ala Gly Thr
    130   135   140

Phe Gly Pro Ser Cys Leu Pro Cys Pro Gly Gly Thr Glu Arg Pro Cys
145   150   155   160

Gly Gly Tyr Gly Gln Cys Glu Gly Glu Gly Thr Arg Gly Gly Ser Gly
                165   170   175

His Cys Asp Cys Gln Ala Gly Tyr Gly Gly Glu Ala Cys Gly Gln Cys
            180   185   190

Gly Leu Gly Tyr Phe Glu Ala Glu Arg Asn Ala Ser His Leu Val Cys
        195   200   205

Ser Ala Cys Phe Gly Pro Cys Ala Arg Cys Ser Gly Pro Glu Glu Ser
    210   215   220

Asn Cys Leu Gln Cys Lys Lys Gly Trp Ala Leu His His Leu Lys Cys
225   230   235   240

Val Asp Ile Asp Glu Cys Gly Thr Glu Gly Ala Asn Cys Gly Ala Asp
                245   250   255

Gln Phe Cys Val Asn Thr Glu Gly Ser Tyr Glu Cys Arg Asp Cys Ala
            260   265   270

Lys Ala Cys Leu Gly Cys Met Gly Ala Gly Pro Gly Arg Cys Lys Lys
            275   280   285

Cys Ser Pro Gly Tyr Gln Gln Val Gly Ser Lys Cys Leu Asp Val Asp
    290   295   300

Glu Cys Glu Thr Glu Val Cys Pro Gly Glu Asn Lys Gln Cys Glu Asn
305   310   315   320

Thr Glu Gly Gly Tyr Arg Cys Ile Cys Ala Glu Gly Tyr Lys Gln Met
                325   330   335

Glu Gly Ile Cys Val Lys Glu Gln Ile Pro Gly Ala Phe Pro Ile Leu
            340   345   350

Thr Asp Leu Thr Pro Glu Thr Thr Arg Arg Trp Lys Leu Gly Ser His
        355   360   365

Pro His Ser Thr Tyr Val Lys Met Lys Met Gln Arg Asp Glu Ala Thr
    370   375   380

Phe Pro Gly Leu Tyr Gly Lys Gln Val Ala Lys Leu Gly Ser Gln Ser
385   390   395   400

Arg Gln Ser Asp Arg Gly Thr Arg Leu Ile His Val Ile Asn Ala Leu
            405   410   415

Pro Pro Thr Cys Pro Pro Gln Lys Lys Lys Lys Lys Lys Lys Lys Gly
            420   425   430

Gly Arg

<210> 182
<211> 150
<212> PRT
<213> Homo sapiens

<400> 182
Met Val Met Ile Leu Phe Val Ala Phe Ile Thr Cys Trp Glu Glu Val
  1   5   10   15

Thr Thr Leu Val Gln Ala Ile Arg Ile Thr Ser Tyr Met Asn Glu Thr

```
                20                         25                         30
   Ile Leu Tyr Phe Pro Phe Ser Ser His Ser Ser Tyr Thr Val Arg Ser
           35              40                  45

   Lys Lys Ile Phe Leu Ser Lys Leu Ile Val Cys Phe Leu Ser Thr Trp
       50              55                  60

   Leu Pro Phe Val Leu Leu Gln Val Ile Ile Val Leu Leu Lys Val Gln
   65              70                  75                      80

   Ile Pro Ala Tyr Ile Glu Met Asn Ile Pro Trp Leu Tyr Phe Val Asn
               85                  90                      95

   Ser Phe Leu Ile Ala Thr Val Tyr Trp Phe Asn Cys His Lys Leu Asn
               100             105             110

   Leu Lys Asp Ile Gly Leu Pro Leu Asp Pro Phe Val Asn Trp Lys Cys
           115             120             125

   Cys Phe Ile Pro Leu Thr Ile Pro Asn Leu Glu Gln Ile Glu Lys Pro
       130             135             140

   Ile Ser Ile Met Ile Cys
   145             150


   <210> 183
   <211> 110
   <212> PRT
   <213> Homo sapiens

   <400> 183
   His Ala Ser Gly Trp Arg Thr Pro Arg Asp Pro Glu Arg Pro Pro Arg
    1               5                  10                  15

   His Ile Gln Thr Ser Ala Ala Pro Ala Pro Ser Gln Pro Ser Trp Asp
               20                  25                  30

   Ser Arg Ala His Pro Thr Gln Arg Arg Asp Pro Gly Pro Pro Gly Pro
           35                  40                  45

   Ser Ala Asp Ser Thr Ala His Phe Pro Gly Pro Pro His Thr Ser Gln
       50                  55                  60

   Pro Ser Gly Arg Ser Leu Pro Thr Arg Cys Arg Val Pro Pro Ala Leu
   65                  70                  75                      80

   Ser Arg Pro Gly Ser Pro Pro Pro Gly Pro Arg Gly Gly Pro Ser Gln
                   85                  90                      95

   Ala Pro Phe Glu Pro Arg Arg Arg Pro Gly Leu Gly Arg Thr
                   100             105             110


   <210> 184
   <211> 56
   <212> PRT
   <213> Homo sapiens

   <400> 184
   His Ala Ser Gly Trp Arg Thr Pro Arg Asp Pro Glu Arg Pro Pro Arg
    1               5                  10                  15

   His Ile Gln Thr Ser Ala Ala Pro Ala Pro Ser Gln Pro Ser Trp Asp
                   20                  25                  30
```

Ser Arg Ala His Pro Thr Gln Arg Arg Asp Pro Gly Pro Pro Gly Pro
         35   40   45

Ser Ala Asp Ser Thr Ala His Phe
     50   55

<210> 185
<211> 54
<212> PRT
<213> Homo sapiens

<400> 185
Pro Gly Pro Pro His Thr Ser Gln Pro Ser Gly Arg Ser Leu Pro Thr
 1   5   10   15

Arg Cys Arg Val Pro Pro Ala Leu Ser Arg Pro Gly Ser Pro Pro Pro
             20   25   30

Gly Pro Arg Gly Gly Pro Ser Gln Ala Pro Phe Glu Pro Arg Arg Arg
         35   40   45

Pro Gly Leu Gly Arg Thr
     50

<210> 186
<211> 723
<212> PRT
<213> Homo sapiens

<400> 186
His Ala Ser Ala Ser Pro Gly Arg Val Asp Ala Asp Ser Asn Ala Val
 1   5   10   15

Ala Ser Gly Pro Arg Thr Pro Ser Gly Pro Thr Arg Gln Glu Arg Leu
             20   25   30

Arg Pro Arg Pro Ala Pro Pro Gly Ser Leu Arg Arg Arg Arg Leu Pro
         35   40   45

Gly Gln Lys Met Cys Ser Arg Val Pro Leu Leu Leu Pro Leu Leu Leu
     50   55   60

Leu Leu Ala Leu Gly Pro Gly Val Gln Gly Cys Pro Ser Gly Cys Gln
 65   70   75   80

Cys Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr
             85   90   95

Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe Glu
             100   105   110

Asn Gly Ile Thr Met Leu Asp Ala Gly Ser Phe Ala Gly Leu Pro Gly
         115   120   125

Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser Leu Pro Ser
     130   135   140

Gly Val Phe Gln Pro Leu Ala Asn Leu Ser Asn Leu Asp Leu Thr Ala
145   150   155   160

Asn Arg Leu His Glu Ile Thr Asn Glu Thr Phe Arg Gly Leu Arg Arg
             165   170   175

Leu Glu Arg Leu Tyr Leu Gly Lys Asn Arg Ile Arg His Ile Gln Pro
            180   185   190

Gly Ala Phe Asp Thr Leu Asp Arg Leu Leu Glu Leu Lys Leu Gln Asp
        195   200   205

Asn Glu Leu Arg Ala Leu Pro Pro Leu Arg Leu Pro Arg Leu Leu Leu
    210   215   220

Leu Asp Leu Ser His Asn Ser Leu Leu Ala Leu Glu Pro Gly Ile Leu
225   230   235   240

Asp Thr Ala Asn Val Glu Ala Leu Arg Leu Ala Gly Leu Gly Leu Gln
            245   250   255

Gln Leu Asp Glu Gly Leu Phe Ser Arg Leu Arg Asn Leu His Asp Leu
        260   265   270

Asp Val Ser Asp Asn Gln Leu Glu Arg Val Pro Pro Val Ile Arg Gly
        275   280   285

Leu Arg Gly Leu Thr Arg Leu Arg Leu Ala Gly Asn Thr Arg Ile Ala
    290   295   300

Gln Leu Arg Pro Glu Asp Leu Ala Gly Leu Ala Ala Leu Gln Glu Leu
305   310   315   320

Asp Val Ser Asn Leu Ser Leu Gln Ala Leu Pro Gly Asp Leu Ser Gly
            325   330   335

Leu Phe Pro Arg Leu Arg Leu Leu Ala Ala Ala Arg Asn Pro Phe Asn
            340   345   350

Cys Val Cys Pro Leu Ser Trp Phe Gly Pro Trp Val Arg Glu Ser His
        355   360   365

Val Thr Leu Ala Ser Pro Glu Glu Thr Arg Cys His Phe Pro Pro Lys
    370   375   380

Asn Ala Gly Arg Leu Leu Leu Glu Leu Asp Tyr Ala Asp Phe Gly Cys
385   390   395   400

Pro Ala Thr Thr Thr Thr Ala Thr Val Pro Thr Thr Arg Pro Val Val
            405   410   415

Arg Glu Pro Thr Ala Leu Ser Ser Ser Leu Ala Pro Thr Trp Leu Ser
        420   425   430

Pro Thr Ala Pro Ala Thr Glu Ala Pro Ser Pro Ser Thr Ala Pro
        435   440   445

Pro Thr Val Gly Pro Val Pro Gln Pro Gln Asp Cys Pro Pro Ser Thr
    450   455   460

Cys Leu Asn Gly Gly Thr Cys His Leu Gly Thr Arg His His Leu Ala
465   470   475   480

Cys Leu Cys Pro Glu Gly Phe Thr Gly Leu Tyr Cys Glu Ser Gln Met
            485   490   495

Gly Gln Gly Thr Arg Pro Ser Pro Thr Pro Val Thr Pro Arg Pro Pro
            500   505   510

Arg Ser Leu Thr Leu Gly Ile Glu Pro Val Ser Pro Thr Ser Leu Arg
    515   520   525

Val Gly Leu Gln Arg Tyr Leu Gln Gly Ser Ser Val Gln Leu Arg Ser
    530   535   540

Leu Arg Leu Thr Tyr Arg Asn Leu Ser Gly Pro Asp Lys Arg Leu Val
545   550   555   560

Thr Leu Arg Leu Pro Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu
                565   570   575

Arg Pro Asn Ala Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro Gly
            580   585   590

Arg Val Pro Glu Gly Glu Glu Ala Cys Gly Glu Ala His Thr Pro Pro
            595   600   605

Ala Val His Ser Asn His Ala Pro Val Thr Gln Ala Arg Glu Gly Asn
    610   615   620

Leu Pro Leu Leu Ile Ala Pro Ala Leu Ala Ala Val Leu Leu Ala Ala
625   630   635   640

Leu Ala Ala Val Gly Ala Ala Tyr Cys Val Arg Arg Gly Arg Ala Met
            645   650   655

Ala Ala Ala Ala Gln Asp Lys Gly Gln Val Gly Pro Gly Ala Gly Pro
        660   665   670

Leu Glu Leu Glu Gly Val Lys Val Pro Leu Glu Pro Gly Pro Lys Ala
        675   680   685

Thr Glu Ala Val Glu Arg Pro Cys Pro Ala Gly Leu Ser Val Lys Cys
    690   695   700

His Ser Trp Ala Ser Lys Ala Trp Pro Gln Ser Pro Leu His Ala Lys
705   710   715   720

Pro Tyr Ile

<210> 187
<211> 51
<212> PRT
<213> Homo sapiens

<400> 187
His Ala Ser Gly Arg Leu Gln Thr Gln Arg Glu Gly Gly Gln Gly Val
  1   5   10   15

Gly Arg Arg Arg Thr Glu Glu Gly Thr Glu Thr Gln Ser Lys Gly Gly
            20   25   30

Lys Glu Glu Thr Leu Val Gly Gly Arg His Ser Gly Glu Arg Gly Gly
            35   40   45

Trp Ala Glu
    50

<210> 188
<211> 59
<212> PRT
<213> Homo sapiens

<400> 188
Pro Arg Val Arg Ala Glu Ser Glu Gly Thr Tyr Asp Thr Tyr Gln His

```
 1                5                    10                    15
Val Pro Val Glu Ser Phe Ala Glu Val Leu Leu Arg Thr Gly Lys Leu
            20                    25                30

Ala Glu Ala Lys Asn Lys Gly Glu Val Phe Pro Thr Thr Glu Val Leu
            35                    40                45

Leu Gln Leu Ala Ser Glu Ala Leu Pro Asn Asp
    50                    55
```

```
<210> 189
<211> 35
<212> PRT
<213> Homo sapiens

<400> 189
Thr Leu Asn His Leu Glu Lys Ser Leu Ala His Leu Glu Thr Leu Ser
 1                5                    10                    15

His Ser Phe Ile Leu Ser Leu Lys Asn Ser Glu Gln Glu Thr Leu Gln
            20                    25                30

Lys Tyr Ser
        35
```

```
<210> 190
<211> 36
<212> PRT
<213> Homo sapiens

<400> 190
His Leu Tyr Asp Leu Ser Arg Ser Glu Lys Glu Lys Leu His Asp Glu
 1                5                    10                    15

Ala Val Ala Ile Cys Leu Asp Gly Gln Pro Leu Ala Met Ile Gln Gln
            20                    25                30

Leu Leu Glu Val
        35
```

```
<210> 191
<211> 35
<212> PRT
<213> Homo sapiens

<400> 191
Ala Val Gly Pro Leu Asp Ile Ser Pro Lys Asp Ile Val Gln Ser Ala
 1                5                    10                    15

Ile Met Lys Ile Ile Ser Ala Leu Ser Gly Gly Ser Ala Asp Leu Gly
            20                    25                30

Gly Pro Arg
        35
```

```
<210> 192
<211> 36
<212> PRT
<213> Homo sapiens

<400> 192
```

Asp Pro Leu Lys Val Leu Glu Gly Val Val Ala Ala Val His Ala Ser
1   5   10   15

Val Asp Lys Gly Glu Glu Leu Val Ser Pro Glu Asp Leu Leu Glu Trp
            20   25   30

Leu Arg Pro Phe
            35

<210> 193
<211> 35
<212> PRT
<213> Homo sapiens

<400> 193
Cys Ala Asp Asp Ala Trp Pro Val Arg Pro Arg Ile His Val Leu Gln
1   5   10   15

Ile Leu Gly Gln Ser Phe His Leu Thr Glu Glu Asp Ser Lys Leu Leu
            20   25   30

Val Phe Phe
        35

<210> 194
<211> 37
<212> PRT
<213> Homo sapiens

<400> 194
Arg Thr Glu Ala Ile Leu Lys Ala Ser Trp Pro Gln Arg Gln Val Asp
1   5   10   15

Ile Ala Asp Ile Glu Asn Glu Glu Asn Arg Tyr Cys Leu Phe Met Glu
            20   25   30

Leu Leu Glu Ser Ser
            35

<210> 195
<211> 34
<212> PRT
<213> Homo sapiens

<400> 195
His His Glu Ala Glu Phe Gln His Leu Val Leu Leu Leu Gln Ala Trp
1   5   10   15

Pro Pro Met Lys Ser Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg
            20   25   30

Leu Ala

<210> 196
<211> 36
<212> PRT
<213> Homo sapiens

<400> 196
Thr Val Met Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly
1   5   10   15

Asn Glu Val Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met
            20   25   30

Leu Pro Ala Glu
            35

<210> 197
<211> 35
<212> PRT
<213> Homo sapiens

<400> 197
Gly Val Lys Glu Leu Cys Leu Leu Leu Asn Gln Ser Leu Leu Leu
 1   5   10   15

Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu His Glu
            20   25   30

Met Ala Leu
        35

<210> 198
<211> 36
<212> PRT
<213> Homo sapiens

<400> 198
Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp Ser Asn Cys Asp Gln
 1   5   10   15

Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu Leu Val Lys Cys Val
            20   25   30

Ser Thr Pro Phe
        35

<210> 199
<211> 35
<212> PRT
<213> Homo sapiens

<400> 199
Tyr Pro Arg Ile Val Asp His Leu Leu Ala Ser Leu Gln Gln Gly Arg
 1   5   10   15

Trp Asp Ala Glu Glu Leu Gly Arg His Leu Arg Glu Ala Gly His Glu
            20   25   30

Ala Glu Ala
        35

<210> 200
<211> 28
<212> PRT
<213> Homo sapiens

<400> 200
Gly Ser Leu Leu Leu Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr
 1   5   10   15

Phe Ser Thr Ala Leu Arg Ala Ala Gln His Trp Val

20   25

<210> 201
<211> 38
<212> PRT
<213> Homo sapiens

<400> 201
Pro Ser Ser Tyr Thr Ala Thr Met Asn Val Ser Trp Ile Ser Leu Arg
 1   5   10   15

Arg Arg Ser Phe Arg Ala Phe Gly Arg Val Trp Thr Cys Ser Gly Leu
            20   25   30

Leu Gln Met Thr Ser Ile
            35

<210> 202
<211> 33
<212> PRT
<213> Homo sapiens

<400> 202
Lys Gly Lys Leu Ser Leu Val Trp Gln Arg Leu Asp Gly His Phe Cys
 1   5   10   15

Arg Thr Leu Glu Glu Ser Val Tyr Ser Ile Ala Ile Ser Leu Ala Gln
            20   25   30

Arg

<210> 203
<211> 35
<212> PRT
<213> Homo sapiens

<400> 203
Tyr Ser Val Ser Arg Trp Glu Val Phe Met Thr His Leu Glu Phe Leu
 1   5   10   15

Phe Thr Asp Ser Gly Leu Ser Thr Leu Glu Ile Glu Asn Arg Ala Gln
            20   25   30

Asp Leu His
            35

<210> 204
<211> 36
<212> PRT
<213> Homo sapiens

<400> 204
Leu Phe Glu Thr Leu Lys Thr Asp Pro Glu Ala Phe His Gln His Met
 1   5   10   15

Val Lys Tyr Ile Tyr Pro Thr Ile Gly Gly Phe Asp His Glu Arg Leu
            20   25   30

Gln Tyr Tyr Phe
            35

<210> 205
<211> 35
<212> PRT
<213> Homo sapiens

<400> 205
Thr Leu Leu Glu Asn Cys Gly Cys Ala Asp Leu Gly Asn Cys Ala Ile
 1   5   10   15

Lys Pro Glu Thr His Ile Arg Leu Leu Lys Lys Phe Lys Val Val Ala
            20   25   30

Ser Gly Leu
        35

<210> 206
<211> 36
<212> PRT
<213> Homo sapiens

<400> 206
Asn Tyr Lys Lys Leu Thr Asp Glu Asn Met Ser Pro Leu Glu Ala Leu
 1   5   10   15

Glu Pro Val Leu Ser Ser Gln Asn Ile Leu Ser Ile Ser Lys Leu Val
            20   25   30

Pro Lys Ile Pro
        35

<210> 207
<211> 36
<212> PRT
<213> Homo sapiens

<400> 207
Glu Lys Asp Gly Gln Met Leu Ser Pro Ser Ser Leu Tyr Thr Ile Trp
 1   5   10   15

Leu Gln Lys Leu Phe Trp Thr Gly Asp Pro His Leu Ile Lys Gln Val
            20   25   30

Pro Gly Ser Ser
        35

<210> 208
<211> 35
<212> PRT
<213> Homo sapiens

<400> 208
Pro Glu Trp Leu His Ala Tyr Asp Val Cys Met Lys Tyr Phe Asp Arg
 1   5   10   15

Leu His Pro Gly Asp Leu Ile Thr Val Val Asp Ala Val Thr Phe Ser
            20   25   30

Pro Lys Ala
        35

<210> 209

<211> 244
<212> PRT
<213> Homo sapiens

<400> 209
```
Met Leu Val Tyr Leu Ile Thr Gly Asp Val Lys Phe Gly Leu Leu Ala
1               5                   10                  15

Arg Val Gly Cys Cys Leu Thr Val Pro Thr Glu Arg Cys Phe Phe Ser
            20                  25                  30

Phe Cys Ala Ala Val Lys Lys Pro Ala Pro Ala Pro Pro Lys Pro Gly
        35                  40                  45

Asn Pro Pro Pro Gly His Pro Gly Gly Gln Ser Ser Ser Gly Thr Ser
    50                  55                  60

Gln His Pro Pro Ser Leu Ser Pro Lys Pro Pro Thr Arg Ser Pro Ser
65                  70                  75                  80

Pro Pro Thr Gln His Thr Gly Gln Pro Pro Gly Gln Pro Ser Ala Pro
            85                  90                  95

Ser Gln Leu Ser Ala Pro Arg Arg Tyr Ser Ser Ser Leu Ser Pro Ile
            100                 105                 110

Gln Ala Pro Asn His Pro Pro Pro Gln Pro Pro Thr Gln Ala Thr Pro
        115                 120                 125

Leu Met His Thr Lys Pro Asn Ser Gln Gly Pro Pro Asn Pro Met Ala
    130                 135                 140

Leu Pro Ser Glu His Gly Leu Glu Gln Pro Ser His Thr Pro Pro Gln
145                 150                 155                 160

Thr Pro Thr Pro Pro Ser Thr Pro Pro Leu Gly Lys Gln Asn Pro Ser
            165                 170                 175

Leu Pro Ala Pro Gln Thr Leu Ala Gly Gly Asn Pro Glu Thr Ala Gln
            180                 185                 190

Pro His Ala Gly Thr Leu Pro Arg Pro Arg Pro Val Pro Lys Pro Arg
    195                 200                 205

Asn Arg Pro Ser Val Pro Pro Pro Gln Pro Pro Gly Val His Ser
    210                 215                 220

Ala Gly Asp Ser Ser Leu Thr Asn Thr Ala Pro Thr Ala Ser Lys Ile
225                 230                 235                 240

Val Thr Asp Val
```


<210> 210
<211> 36
<212> PRT
<213> Homo sapiens

<400> 210
```
Pro Thr Arg Pro Arg Arg Arg Ser Pro Ser Pro Thr Gln Cys Gly Ala
1               5                   10                  15

Arg Arg Glu Pro Arg Arg Lys Leu Ser Ala Ser Ala Arg Gln Ala Arg
            20                  25                  30
```

Arg Arg Arg Ala
        35

<210> 211
<211> 195
<212> PRT
<213> Homo sapiens

<400> 211
Met Lys Phe Thr Ile Val Phe Ala Gly Leu Leu Gly Val Phe Leu Ala
 1   5   10   15

Pro Ala Leu Ala Asn Tyr Asn Ile Asn Val Asn Asp Asp Asn Asn Asn
            20   25   30

Ala Gly Ser Gly Gln Gln Ser Val Ser Val Asn Asn Glu His Asn Val
        35   40   45

Ala Asn Val Asp Asn Asn Asn Gly Trp Asp Ser Trp Asn Ser Ile Trp
    50   55   60

Asp Tyr Gly Asn Gly Phe Ala Ala Thr Arg Leu Phe Gln Lys Lys Thr
65   70   75   80

Cys Ile Val His Lys Met Asn Lys Glu Val Met Pro Ser Ile Gln Ser
                85   90   95

Leu Asp Ala Leu Val Lys Glu Lys Lys Leu Gln Gly Lys Gly Pro Gly
            100   105   110

Gly Pro Pro Pro Lys Gly Leu Met Tyr Ser Val Asn Pro Asn Lys Val
        115   120   125

Asp Asp Leu Ser Lys Phe Gly Lys Asn Ile Ala Asn Met Cys Arg Gly
    130   135   140

Ile Pro Thr Tyr Met Ala Glu Glu Met Gln Glu Ala Ser Leu Phe Phe
145   150   155   160

Tyr Ser Gly Thr Cys Tyr Thr Thr Ser Val Leu Trp Ile Val Asp Ile
                165   170   175

Ser Phe Cys Gly Asp Thr Gly Gly Glu Leu Asn Asn Phe Leu Lys Pro
            180   185   190

Leu Trp Ile
        195

<210> 212
<211> 182
<212> PRT
<213> Homo sapiens

<400> 212
Met Lys Phe Thr Ile Val Phe Ala Gly Leu Leu Gly Val Phe Leu Ala
 1   5   10   15

Pro Ala Leu Ala Asn Tyr Asn Ile Asn Val Asn Asp Asp Asn Asn Asn
            20   25   30

Ala Gly Ser Gly Gln Gln Ser Val Ser Val Asn Asn Glu His Asn Val
        35   40   45

Ala Asn Val Asp Asn Asn Asn Gly Trp Asp Ser Trp Asn Ser Ile Trp

```
              50                      55                      60
Asp Tyr Gly Asn Gly Phe Ala Ala Thr Arg Leu Phe Gln Lys Lys Thr
65              70              75              80

Cys Ile Val His Lys Met Asn Lys Glu Val Met Pro Ser Ile Gln Ser
                85              90              95

Leu Asp Ala Leu Val Lys Glu Lys Lys Leu Gln Gly Lys Gly Pro Gly
            100             105             110

Gly Pro Pro Pro Lys Gly Leu Met Tyr Ser Val Asn Pro Asn Lys Val
        115             120             125

Asp Asp Leu Ser Lys Phe Gly Lys Asn Ile Ala Asn Met Cys Arg Gly
    130             135             140

Ile Pro Thr Tyr Met Ala Glu Glu Met Gln Glu Ala Ser Leu Phe Phe
145             150             155             160

Tyr Ser Gly Thr Cys Tyr Thr Thr Ser Val Leu Trp Ile Val Asp Ile
            165             170             175

Ser Phe Cys Gly Asp Thr
            180


<210> 213
<211> 13
<212> PRT
<213> Homo sapiens

<400> 213
Gly Gly Glu Leu Asn Asn Phe Leu Lys Pro Leu Trp Ile
1               5               10


<210> 214
<211> 171
<212> PRT
<213> Homo sapiens

<400> 214
Phe Ile Phe Ser Val Lys Lys Lys Lys Thr Asp Asp Gly Pro Ser Leu
1               5               10              15

Gly Ala Gln Asp Gln Arg Ser Thr Pro Thr Asn Gln Lys Gly Ser Ile
            20              25              30

Ile Pro Asn Asn Ile Arg His Lys Phe Gly Ser Asn Val Val Asp Gln
            35              40              45

Leu Val Ser Glu Glu Gln Ala Gln Lys Ala Ile Asp Glu Val Phe Glu
    50              55              60

Gly Gln Lys Arg Ala Ser Ser Trp Pro Ser Arg Thr Gln Asn Pro Val
65              70              75              80

Glu Ile Ser Ser Val Phe Ser Asp Tyr Tyr Asp Leu Gly Tyr Asn Met
                85              90              95

Arg Ser Asn Leu Phe Arg Gly Ala Ala Glu Glu Thr Lys Ser Leu Met
            100             105             110

Lys Ala Ser Tyr Thr Pro Glu Val Ile Glu Lys Ser Val Arg Asp Leu
            115             120             125
```

```
Glu His Trp His Gly Arg Lys Thr Asp Asp Leu Gly Arg Trp His Gln
    130             135             140
```

```
Lys Asn Ala Met Asn Leu Asn Leu Gln Lys Ala Leu Glu Glu Lys Tyr
145             150             155             160
```

```
Gly Glu Asn Ser Lys Ser Lys Ser Ser Lys Tyr
                165             170
```

```
<210> 215
<211> 31
<212> PRT
<213> Homo sapiens
```

```
<400> 215
Gly Ser Ile Ile Pro Asn Asn Ile Arg His Lys Phe Gly Ser Asn Val
    1           5               10              15
```

```
Val Asp Gln Leu Val Ser Glu Glu Gln Ala Gln Lys Ala Ile Asp
                20              25              30
```

```
<210> 216
<211> 33
<212> PRT
<213> Homo sapiens
```

```
<400> 216
Glu Val Phe Glu Gly Gln Lys Arg Ala Ser Ser Trp Pro Ser Arg Thr
    1           5               10              15
```

```
Gln Asn Pro Val Glu Ile Ser Ser Val Phe Ser Asp Tyr Tyr Asp Leu
                20              25              30
```

```
Gly
```

```
<210> 217
<211> 40
<212> PRT
<213> Homo sapiens
```

```
<400> 217
Tyr Asn Met Arg Ser Asn Leu Phe Arg Gly Ala Ala Glu Glu Thr Lys
    1           5               10              .   15
```

```
Ser Leu Met Lys Ala Ser Tyr Thr Pro Glu Val Ile Glu Lys Ser Val
                20              25              30
```

```
Arg Asp Leu Glu His Trp His Gly
            35              40
```

```
<210> 218
<211> 38
<212> PRT
<213> Homo sapiens
```

```
<400> 218
Arg Lys Thr Asp Asp Leu Gly Arg Trp His Gln Lys Asn Ala Met Asn
    1           5               10              15
```

```
Leu Asn Leu Gln Lys Ala Leu Glu Glu Lys Tyr Gly Glu Asn Ser Lys
```

```
                20                      25                      30
Ser Lys Ser Ser Lys Tyr
            35
```

<210> 219
<211> 39
<212> PRT
<213> Homo sapiens

<400> 219
```
His Glu Ser Ala Arg Gly Arg Trp Glu Gly Gly Gly Arg Arg Ala Cys
  1               5               10                      15

Arg Gly Ser Leu Gly Leu Ala Arg Ala Gln Gly Ala Glu Arg Val Thr
            20                  25                  30

Ser Ser Glu Gln Arg Pro Ala
            35
```

<210> 220
<211> 160
<212> PRT
<213> Homo sapiens

<400> 220
```
Ser Gln Val Pro Lys Arg Thr Asp Ser Ser Glu Pro Cys Gly Leu Ser
  1               5               10                      15

Asp Leu Cys Arg Ser Leu Met Thr Lys Pro Gly Cys Ser Gly Tyr Cys
            20                  25                  30

Leu Ser His Gln Leu Leu Phe Phe Leu Trp Ala Arg Met Arg Gly Cys
            35                  40                  45

Thr Gln Gly Pro Leu Gln Gln Ser Gln Asp Tyr Ile Thr Phe Cys Ala
        50                  55                  60

Asn Met Met Asp Leu Asn Arg Arg Ala Glu Ala Ile Gly Tyr Ala Tyr
 65                  70                  75                  80

Pro Thr Arg Asp Ile Phe Met Glu Asn Ile Met Phe Cys Gly Met Gly
                85                  90                  95

Gly Phe Ser Asp Phe Tyr Lys Leu Arg Trp Leu Glu Ala Ile Leu Ser
            100                 105                 110

Trp Gln Lys Gln Gln Glu Gly Cys Phe Gly Glu Pro Asp Ala Glu Asp
            115                 120                 125

Glu Glu Leu Ser Lys Ala Ile Gln Tyr Gln Gln His Phe Ser Arg Arg
        130                 135                 140

Val Lys Arg Arg Glu Lys Gln Phe Pro Glu Tyr Trp Lys Trp Cys Pro
145                 150                 155                 160
```

<210> 221
<211> 39
<212> PRT
<213> Homo sapiens

<400> 221
Ser Gln Val Pro Lys Arg Thr Asp Ser Ser Glu Pro Cys Gly Leu Ser
1   5   10   15

Asp Leu Cys Arg Ser Leu Met Thr Lys Pro Gly Cys Ser Gly Tyr Cys
            20   25   30

Leu Ser His Gln Leu Leu Phe
        35

<210> 222
<211> 36
<212> PRT
<213> Homo sapiens

<400> 222
Phe Leu Trp Ala Arg Met Arg Gly Cys Thr Gln Gly Pro Leu Gln Gln
1   5   10   15

Ser Gln Asp Tyr Ile Thr Phe Cys Ala Asn Met Met Asp Leu Asn Arg
            20   25   30

Arg Ala Glu Ala
        35

<210> 223
<211> 44
<212> PRT
<213> Homo sapiens

<400> 223
Ile Gly Tyr Ala Tyr Pro Thr Arg Asp Ile Phe Met Glu Asn Ile Met
1   5   10   15

Phe Cys Gly Met Gly Gly Phe Ser Asp Phe Tyr Lys Leu Arg Trp Leu
            20   25   30

Glu Ala Ile Leu Ser Trp Gln Lys Gln Gln Glu Gly
        35   40

<210> 224
<211> 41
<212> PRT
<213> Homo sapiens

<400> 224
Cys Phe Gly Glu Pro Asp Ala Glu Asp Glu Glu Leu Ser Lys Ala Ile
1   5   10   15

Gln Tyr Gln Gln His Phe Ser Arg Arg Val Lys Arg Arg Glu Lys Gln
            20   25   30

Phe Pro Glu Tyr Trp Lys Trp Cys Pro
        35   40

<210> 225
<211> 138
<212> PRT
<213> Homo sapiens

<400> 225

Met Thr Lys Pro Gly Cys Ser Gly Tyr Cys Leu Ser His Gln Leu Leu
1   5   10   15

Phe Phe Leu Trp Ala Arg Met Arg Gly Cys Thr Gln Gly Pro Leu Gln
        20   25   30

Gln Ser Gln Asp Tyr Ile Thr Phe Cys Ala Asn Met Met Asp Leu Asn
        35   40   45

Arg Arg Ala Glu Ala Ile Gly Tyr Ala Tyr Pro Thr Arg Asp Ile Phe
    50   55   60

Met Glu Asn Ile Met Phe Cys Gly Met Gly Gly Phe Ser Asp Phe Tyr
65   70   75   80

Lys Leu Arg Trp Leu Glu Ala Ile Leu Ser Trp Gln Lys Gln Gln Glu
            85   90   95

Gly Cys Phe Gly Glu Pro Asp Ala Glu Asp Glu Glu Leu Ser Lys Ala
        100   105   110

Ile Gln Tyr Gln Gln His Phe Ser Arg Arg Val Lys Arg Arg Glu Lys
        115   120   125

Gln Phe Pro Glu Tyr Trp Lys Trp Cys Pro
        130   135

<210> 226
<211> 92
<212> PRT
<213> Homo sapiens

<400> 226
Phe Cys Ala Asn Met Met Asp Leu Asn Arg Arg Ala Glu Ala Ile Gly
1   5   10   15

Tyr Ala Tyr Pro Thr Arg Asp Ile Phe Met Glu Asn Ile Met Phe Cys
        20   25   30

Gly Met Gly Gly Phe Ser Asp Phe Tyr Lys Leu Arg Trp Leu Glu Ala
        35   40   45

Ile Leu Ser Trp Gln Lys Gln Gln Glu Gly Cys Phe Gly Glu Pro Asp
    50   55   60

Ala Glu Asp Glu Glu Leu Ser Lys Ala Ile Gln Tyr Gln Gln His Phe
65   70   75   80

Ser Arg Arg Val Lys Arg Arg Glu Lys Gln Phe Pro
            85   90

<210> 227
<211> 119
<212> PRT
<213> Homo sapiens

<400> 227
Met Ala Ser Leu Gly Leu Leu Leu Leu Leu Leu Thr Ala Leu Pro
1   5   10   15

Pro Leu Trp Ser Ser Ser Leu Pro Gly Leu Asp Thr Ala Glu Ser Lys
        20   25   30

Ala Thr Ile Ala Asp Leu Ile Leu Ser Ala Leu Glu Arg Ala Thr Val

```
              35                    40                    45
Phe Leu Glu Gln Arg Leu Pro Glu Ile Asn Leu Asp Gly Met Val Gly
        50                  55                  60

Val Arg Val Leu Glu Glu Gln Leu Lys Ser Val Arg Glu Lys Trp Ala
 65              70              75                  80

Gln Glu Pro Leu Leu Gln Pro Leu Ser Leu Arg Val Gly Met Leu Gly
            85                  90                  95

Glu Lys Leu Glu Ala Ala Ile Gln Arg Ser Leu His Tyr Leu Lys Leu
           100             105             110

Ser Asp Pro Lys Tyr Leu Arg
           115
```

<210> 228
<211> 175
<212> PRT
<213> Homo sapiens

<400> 228
```
His Glu Ser Ala Arg Gly Arg Trp Glu Gly Gly Gly Arg Arg Ala Cys
 1               5                  10                  15

Arg Gly Ser Leu Gly Leu Ala Arg Ala Gln Gly Ala Glu Arg Val Thr
            20                  25                  30

Ser Ser Glu Gln Arg Pro Ala Met Ala Ser Leu Gly Leu Leu Leu Leu
           35                  40                  45

Leu Leu Leu Thr Ala Leu Pro Pro Leu Trp Ser Ser Ser Leu Pro Gly
        50                  55                  60

Leu Asp Thr Ala Glu Ser Lys Ala Thr Ile Ala Asp Leu Ile Leu Ser
 65              70              75                  80

Ala Leu Glu Arg Ala Thr Val Phe Leu Glu Gln Arg Leu Pro Glu Ile
            85                  90                  95

Asn Leu Asp Gly Met Val Gly Val Arg Val Leu Glu Glu Gln Leu Lys
           100             105             110

Ser Val Arg Glu Lys Trp Ala Gln Glu Pro Leu Leu Gln Pro Leu Ser
           115             120             125

Leu Arg Val Gly Met Leu Gly Glu Lys Leu Glu Ala Ala Ile Gln Arg
        130             135             140

Ser Leu His Tyr Leu Lys Leu Ser Asp Pro Lys Tyr Leu Arg Gly Arg
145             150             155                 160

Thr Ala Ala Ser Pro Ala Ala Ser Gln Thr Ser Ala Gly Ala Ser
                165             170             175
```

<210> 229
<211> 49
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 229
Lys Ser Val Gly Arg Ser Ser Pro Thr Arg Arg Tyr Arg Ala Ala Val
1   5   10   15

Gly Glu Thr Pro Ala Gly Ala Gln Xaa Gln Leu Arg Gly Arg Glu Gly
            20   25   30

Arg Trp Arg Arg Leu Gly Gln Pro Phe Pro Arg Gly Ser Thr Ala Leu
        35   40   45

Arg

<210> 230
<211> 55
<212> PRT
<213> Homo sapiens

<400> 230
Ile Phe Leu Phe Tyr Leu Pro Pro Ser Pro Pro Ser Arg Leu Leu Val
1   5   10   15

Pro Gly Tyr Trp Cys Leu Ala Ser Trp Gln Gly Pro Gly Thr Trp Thr
            20   25   30

Ile Ser His Thr Thr Pro Arg Gly Gly Ile Phe Phe Tyr Phe Pro Tyr
        35   40   45

Glu Lys Gln Ile Phe Leu Arg
    50   55

<210> 231
<211> 479
<212> PRT
<213> Homo sapiens

<400> 231
Met Val Leu Leu His Trp Cys Leu Leu Trp Leu Leu Phe Pro Leu Ser
1   5   10   15

Ser Arg Thr Gln Lys Leu Pro Thr Arg Asp Glu Glu Leu Phe Gln Met
            20   25   30

Gln Ile Arg Asp Lys Ala Phe Phe His Asp Ser Ser Val Ile Pro Asp
        35   40   45

Gly Ala Glu Ile Ser Ser Tyr Leu Phe Arg Asp Thr Pro Lys Arg Tyr
    50   55   60

Phe Phe Val Val Glu Glu Asp Asn Thr Pro Leu Ser Val Thr Val Thr
65   70   75   80

Pro Cys Asp Ala Pro Leu Glu Trp Lys Leu Ser Leu Gln Glu Leu Pro
            85   90   95

Glu Asp Arg Ser Gly Glu Gly Ser Gly Asp Leu Glu Pro Leu Glu Gln
            100   105   110

Gln Lys Gln Gln Ile Ile Asn Glu Glu Gly Thr Glu Leu Phe Ser Tyr
        115   120   125

Lys Gly Asn Asp Val Glu Tyr Phe Ile Ser Ser Ser Ser Pro Ser Gly

```
             130                      135                      140
Leu Tyr Gln Leu Asp Leu Leu Ser Thr Glu Lys Asp Thr His Phe Lys
145             150                 155                     160

Val Tyr Ala Thr Thr Thr Pro Glu Ser Asp Gln Pro Tyr Pro Glu Leu
                165                 170                 175

Pro Tyr Asp Pro Arg Val Asp Val Thr Ser Leu Gly Arg Thr Thr Val
                180                 185                 190

Thr Leu Ala Trp Lys Pro Ser Pro Thr Ala Ser Leu Leu Lys Gln Pro
                195                 200                 205

Ile Gln Tyr Cys Val Val Ile Asn Lys Glu His Asn Phe Lys Ser Leu
    210                 215                 220

Cys Ala Val Glu Ala Lys Leu Ser Ala Asp Asp Ala Phe Met Met Ala
225                 230                 235                     240

Pro Lys Pro Gly Leu Asp Phe Ser Pro Phe Asp Phe Ala His Phe Gly
                245                 250                 255

Phe Pro Ser Asp Asn Ser Gly Lys Glu Arg Ser Phe Gln Ala Lys Pro
                260                 265                 270

Ser Pro Lys Leu Gly Arg His Val Tyr Ser Arg Pro Lys Val Asp Ile
        275                 280                 285

Gln Lys Ile Cys Ile Gly Asn Lys Asn Ile Phe Thr Val Ser Asp Leu
    290                 295                 300

Lys Pro Asp Thr Gln Tyr Tyr Phe Asp Val Phe Val Val Asn Ile Asn
305                 310                 315                     320

Ser Asn Met Ser Thr Ala Tyr Val Gly Thr Phe Ala Arg Thr Lys Glu
                325                 330                 335

Glu Ala Lys Gln Lys Thr Val Glu Leu Lys Asp Gly Lys Ile Thr Asp
            340                 345                 350

Val Phe Val Lys Arg Lys Gly Ala Lys Phe Leu Arg Phe Ala Pro Val
            355                 360                 365

Ser Ser His Gln Lys Val Thr Phe Phe Ile His Ser Cys Leu Asp Ala
    370                 375                 380

Val Gln Ile Gln Val Arg Arg Asp Gly Lys Leu Leu Leu Ser Gln Asn
385                 390                 395                     400

Val Glu Gly Ile Gln Gln Phe Gln Leu Arg Gly Lys Pro Lys Ala Lys
                405                 410                 415

Tyr Leu Val Arg Leu Lys Gly Asn Lys Lys Gly Ala Ser Met Leu Lys
            420                 425                 430

Ile Leu Ala Thr Thr Arg Pro Thr Lys Gln Ser Phe Pro Ser Leu Pro
            435                 440                 445

Glu Asp Thr Arg Ile Lys Ala Phe Asp Lys Leu Arg Thr Cys Ser Ser
    450                 455                 460

Ala Thr Val Ala Trp Leu Gly Thr Gln Glu Arg Asn Lys Phe Cys
465                 470                 475
```

```
<210> 232
<211> 62
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 232
Xaa Arg Gly Met Val Phe Gly Gly Val Val Pro Tyr Val Pro Gln Tyr
 1               5                  10                  15

Arg Asp Ile Arg Arg Thr Gln Asn Ala Asp Gly Phe Ser Thr Tyr Val
                20                  25                  30

Cys Leu Val Leu Leu Val Ala Asn Ile Leu Arg Ile Leu Phe Trp Phe
            35                  40                  45

Gly Arg Arg Phe Glu Ser Pro Leu Leu Trp Gln Ser Ala Ile
        50                  55                  60


<210> 233
<211> 229
<212> PRT
<213> Homo sapiens

<400> 233
Met Val Phe Gly Gly Val Val Pro Tyr Val Pro Gln Tyr Arg Asp Ile
 1               5                  10                  15

Arg Arg Thr Gln Asn Ala Asp Gly Phe Ser Thr Tyr Val Cys Leu Val
                20                  25                  30

Leu Leu Val Ala Asn Ile Leu Arg Ile Leu Phe Trp Phe Gly Arg Arg
            35                  40                  45

Phe Glu Ser Pro Leu Leu Trp Gln Ser Ala Ile Met Ile Leu Thr Met
     50                  55                  60

Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg Val Ala Asn Glu Leu
 65              70                  75                      80

Asn Ala Arg Arg Arg Ser Phe Thr Asp Phe Asp Pro His His Phe Trp
                85                  90                  95

Gln Trp Ser Ser Phe Ser Asp Tyr Val Gln Cys Val Leu Ala Phe Thr
            100                 105                 110

Gly Val Ala Gly Tyr Ile Thr Tyr Leu Ser Ile Asp Ser Ala Leu Phe
            115                 120                 125

Val Glu Thr Leu Gly Phe Leu Ala Val Leu Thr Glu Ala Met Leu Gly
    130                 135                 140

Val Pro Gln Leu Tyr Arg Asn His Arg His Gln Ser Thr Glu Gly Met
145                 150                 155                 160

Ser Ile Lys Met Val Leu Met Trp Thr Ser Gly Asp Ala Phe Lys Thr
                165                 170                 175

Ala Tyr Phe Leu Leu Lys Gly Ala Pro Leu Gln Phe Ser Val Cys Gly
            180                 185                 190
```

```
Leu Leu Gln Val Leu Val Asp Leu Ala Ile Leu Gly Gln Ala Tyr Ala
        195             200             205

Phe Ala Arg His Pro Gln Lys Pro Ala Pro His Ala Val His Pro Thr
    210             215             220

Gly Thr Lys Ala Leu
225
```

```
<210> 234
<211> 28
<212> PRT
<213> Homo sapiens

<400> 234
Met Val Phe Gly Gly Val Val Pro Tyr Val Pro Gln Tyr Arg Asp Ile
  1             5               10              15

Arg Arg Thr Gln Asn Ala Asp Gly Phe Ser Thr Tyr
            20              25
```

```
<210> 235
<211> 12
<212> PRT
<213> Homo sapiens

<400> 235
Gly Arg Arg Phe Glu Ser Pro Leu Leu Trp Gln Ser
  1             5               10
```

```
<210> 236
<211> 44
<212> PRT
<213> Homo sapiens

<400> 236
Gly Val Pro Gln Leu Tyr Arg Asn His Arg His Gln Ser Thr Glu Gly
  1             5               10              15

Met Ser Ile Lys Met Val Leu Met Trp Thr Ser Gly Asp Ala Phe Lys
            20              25              30

Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro Leu Gln
            35              40
```

```
<210> 237
<211> 25
<212> PRT
<213> Homo sapiens

<400> 237
Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala Pro His Ala
  1             5               10              15

Val His Pro Thr Gly Thr Lys Ala Leu
            20              25
```

```
<210> 238
<211> 32
<212> PRT
<213> Homo sapiens
```

<400> 238

```
Arg Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Asp Phe
1               5                   10              15

Asp Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val Gln
            20              25              30
```


<210> 239
<211> 383
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 239

```
Arg Thr Gly Trp Leu Gly Pro Pro Gly Ser Pro Pro Pro Pro His
1               5                   10              15

Val Arg Gly Met Pro Gly Cys Pro Cys Pro Gly Cys Gly Met Ala Gly
            20              25              30

Pro Arg Leu Leu Phe Leu Xaa Ala Leu Ala Leu Glu Leu Leu Gly Arg
            35              40                  45

Ala Gly Gly Ser Gln Pro Ala Leu Arg Ser Arg Gly Thr Ala Thr Ala
    50              55                  60

Cys Arg Leu Asp Asn Lys Glu Ser Glu Ser Trp Gly Ala Leu Leu Ser
65                  70                  75                  80

Gly Glu Arg Leu Asp Thr Trp Ile Cys Ser Leu Leu Gly Ser Leu Met
            85                  90                  95

Val Gly Leu Ser Gly Val Phe Pro Leu Leu Val Ile Pro Leu Glu Met
            100             105                 110

Gly Thr Met Leu Arg Ser Glu Ala Gly Ala Trp Arg Leu Lys Gln Leu
    115                 120                 125

Leu Ser Phe Ala Leu Gly Gly Leu Leu Gly Asn Val Phe Leu His Leu
    130                 135                 140

Leu Pro Glu Ala Trp Ala Tyr Thr Cys Ser Ala Ser Pro Gly Gly Glu
145                 150                 155                 160

Gly Gln Ser Leu Gln Gln Gln Gln Leu Gly Leu Trp Val Ile Ala
            165                 170                 175

Gly Ile Leu Thr Phe Leu Ala Leu Glu Lys Met Phe Leu Asp Ser Lys
            180                 185                 190

Glu Glu Gly Thr Ser Gln Ala Pro Asn Lys Asp Pro Thr Ala Ala Ala
            195                 200                 205

Ala Ala Leu Asn Gly Gly His Cys Leu Ala Gln Pro Ala Ala Glu Pro
    210                 215                 220

Gly Leu Gly Ala Val Val Arg Ser Ile Lys Val Ser Gly Tyr Leu Asn
```

```
225                     230                     235                     240

Leu Leu Ala Asn Thr Ile Asp Asn Phe Thr His Gly Leu Ala Val Ala
            245                 250                 255

Ala Ser Phe Leu Val Ser Lys Lys Ile Gly Leu Leu Thr Thr Met Ala
            260                 265                 270

Ile Leu Leu His Glu Ile Pro His Glu Val Gly Asp Phe Ala Ile Leu
        275                 280                 285

Leu Arg Ala Gly Phe Asp Arg Trp Ser Ala Ala Lys Leu Gln Leu Ser
        290             295                 300

Thr Ala Leu Gly Gly Leu Leu Gly Ala Gly Phe Ala Ile Cys Thr Gln
305             310                 315                 320

Ser Pro Lys Gly Val Glu Glu Thr Ala Ala Trp Val Leu Pro Phe Thr
            325                 330                 335

Ser Gly Gly Phe Leu Tyr Ile Ala Leu Val Asn Val Leu Pro Asp Leu
            340                 345                 350

Leu Glu Glu Glu Asp Pro Trp Arg Ser Leu Gln Gln Leu Leu Leu Leu
        355                 360                 365

Cys Ala Gly Ile Val Val Met Val Leu Phe Ser Leu Phe Val Asp
    370                 375                 380


<210> 240
<211> 24
<212> PRT
<213> Homo sapiens

<400> 240
Arg Val Arg Lys Trp Glu Arg Ser Gln Pro Arg Leu Leu Tyr Thr Gly
  1                 5                   10                  15

Lys Leu Ser Gly Pro Gln Ala Arg
                20


<210> 241
<211> 97
<212> PRT
<213> Homo sapiens

<400> 241
Ser Pro Ala Trp Ala Gln Leu Pro Gln Ser His Pro Leu Pro Thr Ala
  1                 5                   10                  15

Ser Gly Leu Lys Asn Ile Pro Gly Ile Arg Gly Ala Leu Thr Thr Arg
                20                  25                  30

Pro Ser Glu Ser Pro Pro Ala Trp Asn Leu Ala Ile Ser Asn Leu Leu
            35                  40                  45

Pro Ser Ala Ser Trp Ile Lys Leu Glu Thr Ala Gly Thr Pro Gly Met
        50                  55                  60

Ser Leu Pro Ile Leu Pro Cys Leu Cys Ser Phe Leu Asp Leu Thr Tyr
 65                 70                  75                  80

Tyr Phe Phe Cys Phe Cys Phe His Pro Ser Cys Leu Ser Cys Pro Glu
                85                  90                  95
```

Gly

<210> 242
<211> 36
<212> PRT
<213> Homo sapiens

<400> 242
Arg Pro Ser Glu Ser Pro Pro Ala Trp Asn Leu Ala Ile Ser Asn Leu
 1   5   10   15

Leu Pro Ser Ala Ser Trp Ile Lys Leu Glu Thr Ala Gly Thr Pro Gly
                20   25   30

Met Ser Leu Pro
            35

<210> 243
<211> 30
<212> PRT
<213> Homo sapiens

<400> 243
Ile Leu Pro Cys Leu Cys Ser Phe Leu Asp Leu Thr Tyr Tyr Phe Phe
 1   5   10   15

Cys Phe Cys Phe His Pro Ser Cys Leu Ser Cys Pro Glu Gly
                20   25   30

<210> 244
<211> 203
<212> PRT
<213> Homo sapiens

<400> 244
Met Gly Arg Asp Ile Pro Gly Val Pro Ala Val Ser Ser Leu Ile Gln
 1   5   10   15

Glu Ala Leu Gly Arg Arg Leu Leu Met Ala Arg Phe Gln Ala Gly Gly
                20   25   30

Asp Ser Glu Gly Arg Val Val Asn Ala Pro Leu Ile Pro Gly Ile Phe
            35   40   45

Phe Arg Pro Glu Ala Val Gly Arg Gly Trp Leu Cys Gly Ser Trp Ala
    50   55   60

Gln Ala Gly Leu Gln Asn His Pro Leu Trp Gly Asp Asp Gly Gly Gln
65   70   75   80

Phe Gln Gly Pro Pro Ala Ile His Trp Ala Val Trp Leu Arg Leu Ser
                85   90   95

Ala Val Ala Thr Glu Ala Leu Ser Gln Ala Thr Asp Ala Lys Asp Gly
                100   105   110

Gln Asp Asp Gln Glu Asp Asp Asp Glu Asp Pro His Gly Ala Arg Glu
            115   120   125

Glu Leu Val Leu Leu Ala Ala Ala Val Thr Thr Ala Phe Glu Ser Phe
            130   135   140

```
Gly Ala Gly Lys Asp Glu Thr Thr Phe Gly Cys Asn Leu Leu Gly Ala
145             150             155                     160

Ser Gln Gln Ala Glu Gln Gln Gly Gly Arg Glu Ala Gly Asp Pro Ser
            165             170             175

Leu Gly His Pro Gly Leu Gly Ala Thr Glu Leu Ser Cys Val Glu Lys
            180             185             190

Ala Gly Leu Arg Pro Leu Pro Leu Pro Asp Ala
        195             200
```

```
<210> 245
<211> 13
<212> PRT
<213> Homo sapiens

<400> 245
Ala Arg Ala Ala Arg Gly Lys Ile Glu Ser Asn Leu Ile
 1               5               10
```

```
<210> 246
<211> 10
<212> PRT
<213> Homo sapiens

<400> 246
Gly Pro Gln Val Asp Trp Gln Arg Pro Leu
 1               5               10
```

```
<210> 247
<211> 77
<212> PRT
<213> Homo sapiens

<400> 247
His Met Leu Trp Asn Arg Arg Lys Leu Arg Cys Cys Phe His Lys Phe
 1               5               10                      15

Val Leu Ser Leu Ala Leu Gly Pro Ser Phe Leu Phe Trp Lys Asn Leu
            20              25              30

Ser Glu Lys Arg Asp Leu Ser Ser Val Cys Ser Ala Phe Leu Tyr Lys
            35              40              45

Thr Arg Asn Gly Val Asn Ser Arg Asp Met Glu Val Ile Thr Pro Asp
        50              55              60

Ser Leu Cys Trp Leu Leu Arg Phe Ser Gln Gly Glu Val
 65             70              75
```

```
<210> 248
<211> 76
<212> PRT
<213> Homo sapiens

<400> 248
Met Leu Leu Leu Gln Ser Leu Phe Phe Pro Met Ser Trp Gly Ser Gly
 1               5               10                      15

Gly Gly Gly Lys Gly Arg Asp Asp Leu Pro Arg Glu Lys Pro Thr Thr
```

```
                20                      25                      30
Cys Pro Val Phe Asp Arg Leu Phe Asp Ile Phe Ala Lys Ile Pro Leu
        35                  40                  45

Val Glu Ser Gln Ala Ser Cys Ala Arg Ile Gly Ile Ala Ala Ser His
    50                  55                  60

Trp Arg Leu Asp Cys Ser Val Asp Gly Met Gln Ala
 65              70                  75
```

```
<210> 249
<211> 284
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (187)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 249
Met Val Thr Arg Ala Gly Ala Gly Thr Ala Val Ala Gly Ala Val Val
 1               5                  10                  15

Val Ala Leu Leu Ser Ala Ala Leu Ala Leu Tyr Gly Pro Pro Leu Asp
            20                  25                  30

Ala Val Leu Glu Arg Ala Phe Ser Leu Arg Lys Ala His Ser Ile Lys
        35                  40                  45

Asp Met Glu Asn Thr Leu Gln Leu Val Arg Asn Ile Ile Pro Pro Leu
    50                  55                  60

Ser Ser Thr Lys His Lys Gly Gln Asp Gly Arg Ile Gly Val Val Gly
 65              70                  75                      80

Gly Cys Gln Glu Tyr Thr Gly Ala Pro Tyr Phe Ala Arg Ile Ser Ala
                85                  90                  95

Leu Lys Val Gly Ala Asp Leu Ser His Val Phe Cys Ala Ser Ala Ala
            100                 105                 110

Ala Pro Val Ile Lys Ala Tyr Ser Pro Glu Leu Ile Val His Pro Val
        115                 120                 125

Leu Asp Ser Pro Asn Ala Val His Glu Val Glu Lys Trp Leu Pro Arg
    130                 135                 140

Leu His Ala Leu Val Val Gly Pro Gly Leu Gly Arg Asp Asp Ala Leu
145                 150                 155                 160

Leu Arg Asn Val Gln Gly Ile Leu Glu Val Ser Lys Ala Arg Asp Ile
                165                 170                 175

Pro Val Val Ile Asp Ala Asp Gly Leu Trp Xaa Val Ala Gln Gln Pro
                180                 185                 190

Ala Leu Ile His Gly Tyr Arg Lys Ala Val Leu Thr Pro Asn His Val
                195                 200                 205

Glu Phe Ser Arg Leu Tyr Asp Ala Val Leu Arg Gly Pro Met Asp Ser
    210                 215                 220

Asp Asp Ser His Gly Ser Val Leu Arg Leu Ser Gln Ala Leu Gly Asn
```

```
                225                      230                      235                      240
Val Thr Val Val Gln Lys Gly Glu Arg Asp Ile Leu Ser Asn Gly Gln
                    245                      250                      255

Gln Val Leu Val Cys Ser Gln Glu Gly Ser Ser Ala Gly Val Glu Gly
                    260                      265                      270

Lys Gly Thr Ser Cys Arg Ala Pro Trp Ala Ser Trp
                275                      280


<210> 250
<211> 114
<212> PRT
<213> Homo sapiens

<400> 250
Met Ala Trp Val Glu Met Ile Val His Pro Val Leu Asp Ser Pro Asn
  1               5                      10                      15

Ala Val His Glu Val Glu Lys Trp Leu Pro Arg Leu His Ala Leu Val
                20                      25                      30

Val Gly Thr Gly Leu Gly Arg Asp Asp Ala Leu Leu Arg Asn Val Gln
                35                      40                      45

Gly Ile Leu Glu Val Ser Lys Ala Arg Asp Ile Pro Val Val Ile Asp
     50                      55                      60

Ala Asp Gly Leu Trp Leu Val Ala Gln Gln Pro Ala Leu Ile His Gly
 65                      70                      75                      80

Tyr Arg Lys Ala Val Leu Thr Pro Asn His Val Glu Phe Ser Arg Leu
                85                      90                      95

Tyr Asp Ala Val Leu Arg Gly Pro Met Asp Ser Asp Asp Arg Cys Leu
                100                     105                     110

Val Pro


<210> 251
<211> 202
<212> PRT
<213> Homo sapiens

<400> 251
Glu Phe Gly Thr Arg Leu Arg Ala Val Ala Ser Val Gly Ala Ala Leu
  1               5                      10                      15

Ile Leu Phe Pro Cys Leu Leu Tyr Gly Ala Tyr Ala Phe Leu Pro Phe
                20                      25                      30

Asp Val Pro Arg Leu Pro Thr Met Ser Ser Arg Leu Ile Tyr Thr Leu
                35                      40                      45

Arg Cys Gly Val Phe Ala Thr Phe Pro Ile Val Leu Gly Ile Leu Val
     50                      55                      60

Tyr Gly Leu Ser Leu Leu Cys Phe Ser Ala Leu Arg Pro Phe Gly Glu
 65                      70                      75                      80

Pro Arg Arg Glu Val Glu Ile His Arg Arg Tyr Val Ala Gln Ser Val
                85                      90                      95
```

```
Gln Leu Phe Ile Leu Tyr Phe Phe Asn Leu Ala Val Leu Ser Thr Tyr
            100                 105                 110

Leu Pro Gln Asp Thr Leu Lys Leu Leu Pro Leu Leu Thr Gly Leu Phe
            115                 120                 125

Ala Val Ser Arg Leu Ile Tyr Trp Leu Thr Phe Ala Val Gly Arg Ser
    130                 135                 140

Phe Arg Gly Phe Gly Tyr Gly Leu Thr Phe Leu Pro Leu Leu Ser Met
145                 150                 155                 160

Leu Met Trp Asn Leu Tyr Tyr Met Phe Val Val Glu Pro Glu Arg Met
            165                 170                 175

Leu Thr Ala Thr Glu Ser Arg Leu Asp Tyr Pro Asp His Ala Arg Ser
            180                 185                 190

Ala Ser Asp Tyr Arg Pro Arg Pro Trp Gly
            195                 200
```

```
<210> 252
<211> 22
<212> PRT
<213> Homo sapiens

<400> 252
Thr Trp Gly His Val His Thr Thr Ala Arg Ala Tyr Cys Val Ser Arg
  1               5                  10                  15

Trp Leu Val Cys Leu Arg
                20
```

```
<210> 253
<211> 30
<212> PRT
<213> Homo sapiens

<400> 253
Gly Thr Ser Phe Ser Ile Leu Ser Leu Ala Ala Cys Leu Val Val Glu
  1               5                  10                  15

Ala Val Val Trp Lys Ser Val Thr Lys Asn Arg Thr Ser Tyr
                20                  25                  30
```

```
<210> 254
<211> 241
<212> PRT
<213> Homo sapiens

<400> 254
His Trp Gly Leu Met Leu Phe Tyr Arg Leu Val Phe Ile Leu His Glu
  1               5                  10                  15

Thr Ser Arg Ser Thr Gln Lys Ala Ile Ala Phe Cys Leu Gly Tyr Gly
                20                  25                  30

Cys Pro Leu Ala Ile Ser Val Ile Thr Leu Gly Ala Thr Gln Pro Arg
                35                  40                  45

Glu Val Tyr Thr Arg Lys Asn Val Cys Trp Leu Asn Trp Glu Asp Thr
    50                  55                  60
```

```
Lys Ala Leu Leu Ala Phe Ala Ile Pro Ala Leu Ile Ile Val Val Val
 65              70              75              80

Asn Ile Thr Ile Thr Ile Val Val Ile Thr Lys Ile Leu Arg Pro Ser
             85              90                  95

Ile Gly Asp Lys Pro Cys Lys Gln Glu Lys Ser Ser Leu Phe Gln Ile
            100              105             110

Ser Lys Ser Ile Gly Val Leu Thr Pro Leu Leu Gly Leu Thr Trp Gly
        115              120             125

Phe Gly Leu Thr Thr Val Phe Pro Gly Thr Asn Leu Val Phe His Ile
    130              135             140

Ile Phe Ala Ile Leu Asn Val Phe Gln Gly Leu Phe Ile Leu Leu Phe
145              150             155             160

Gly Cys Leu Trp Asp Leu Lys Val Gln Glu Ala Leu Leu Asn Lys Phe
            165             170             175

Ser Leu Ser Arg Trp Ser Ser Gln His Ser Lys Ser Thr Ser Leu Gly
            180             185             190

Ser Ser Thr Pro Val Phe Ser Met Ser Ser Pro Ile Ser Arg Arg Phe
        195             200             205

Asn Asn Leu Phe Gly Lys Thr Gly Thr Tyr Asn Val Ser Thr Pro Glu
    210             215             220

Ala Thr Ser Ser Ser Leu Glu Asn Ser Ser Ser Ala Ser Ser Leu Leu
225             230             235             240

Asn
```

<210> 255
<211> 36
<212> PRT
<213> Homo sapiens

<400> 255
```
His Trp Gly Leu Met Leu Phe Tyr Arg Leu Val Phe Ile Leu His Glu
 1           5              10              15

Thr Ser Arg Ser Thr Gln Lys Ala Ile Ala Phe Cys Leu Gly Tyr Gly
            20              25              30

Cys Pro Leu Ala
        35
```

<210> 256
<211> 35
<212> PRT
<213> Homo sapiens

<400> 256
```
Ile Ser Val Ile Thr Leu Gly Ala Thr Gln Pro Arg Glu Val Tyr Thr
 1           5              10              15

Arg Lys Asn Val Cys Trp Leu Asn Trp Glu Asp Thr Lys Ala Leu Leu
            20              25              30
```

Ala Phe Ala
          35

<210> 257
<211> 35
<212> PRT
<213> Homo sapiens

<400> 257
Ile Pro Ala Leu Ile Ile Val Val Val Asn Ile Thr Ile Thr Ile Val
 1   5   10   15

Val Ile Thr Lys Ile Leu Arg Pro Ser Ile Gly Asp Lys Pro Cys Lys
            20   25   30

Gln Glu Lys
          35

<210> 258
<211> 36
<212> PRT
<213> Homo sapiens

<400> 258
Ser Ser Leu Phe Gln Ile Ser Lys Ser Ile Gly Val Leu Thr Pro Leu
 1   5   10   15

Leu Gly Leu Thr Trp Gly Phe Gly Leu Thr Thr Val Phe Pro Gly Thr
            20   25   30

Asn Leu Val Phe
          35

<210> 259
<211> 36
<212> PRT
<213> Homo sapiens

<400> 259
His Ile Ile Phe Ala Ile Leu Asn Val Phe Gln Gly Leu Phe Ile Leu
 1   5   10   15

Leu Phe Gly Cys Leu Trp Asp Leu Lys Val Gln Glu Ala Leu Leu Asn
            20   25   30

Lys Phe Ser Leu
          35

<210> 260
<211> 35
<212> PRT
<213> Homo sapiens

<400> 260
Ser Arg Trp Ser Ser Gln His Ser Lys Ser Thr Ser Leu Gly Ser Ser
 1   5   10   15

Thr Pro Val Phe Ser Met Ser Ser Pro Ile Ser Arg Arg Phe Asn Asn
            20   25   30

Leu Phe Gly
          35

```
<210> 261
<211> 28
<212> PRT
<213> Homo sapiens

<400> 261
Lys Thr Gly Thr Tyr Asn Val Ser Thr Pro Glu Ala Thr Ser Ser Ser
 1               5                  10                  15

Leu Glu Asn Ser Ser Ser Ala Ser Ser Leu Leu Asn
            20              25


<210> 262
<211> 237
<212> PRT
<213> Homo sapiens

<400> 262
Met Leu Phe Tyr Arg Leu Val Phe Ile Leu His Glu Thr Ser Arg Ser
 1               5                  10                  15

Thr Gln Lys Ala Ile Ala Phe Cys Leu Gly Tyr Gly Cys Pro Leu Ala
            20                  25                  30

Ile Ser Val Ile Thr Leu Gly Ala Thr Gln Pro Arg Glu Val Tyr Thr
            35                  40                  45

Arg Lys Asn Val Cys Trp Leu Asn Trp Glu Asp Thr Lys Ala Leu Leu
    50                  55                  60

Ala Phe Ala Ile Pro Ala Leu Ile Ile Val Val Val Asn Ile Thr Ile
 65                  70                  75                  80

Thr Ile Val Val Ile Thr Lys Ile Leu Arg Pro Ser Ile Gly Asp Lys
                85                  90                  95

Pro Cys Lys Gln Glu Lys Ser Ser Leu Phe Gln Ile Ser Lys Ser Ile
            100                 105                 110

Gly Val Leu Thr Pro Leu Leu Gly Leu Thr Trp Gly Phe Gly Leu Thr
            115                 120                 125

Thr Val Phe Pro Gly Thr Asn Leu Val Phe His Ile Ile Phe Ala Ile
            130                 135                 140

Leu Asn Val Phe Gln Gly Leu Phe Ile Leu Leu Phe Gly Cys Leu Trp
145                 150                 155                 160

Asp Leu Lys Val Gln Glu Ala Leu Leu Asn Lys Phe Ser Leu Ser Arg
                165                 170                 175

Trp Ser Ser Gln His Ser Lys Ser Thr Ser Leu Gly Ser Ser Thr Pro
            180                 185                 190

Val Phe Ser Met Ser Ser Pro Ile Ser Arg Arg Phe Asn Asn Leu Phe
            195                 200                 205

Gly Lys Thr Gly Thr Tyr Asn Val Ser Thr Pro Glu Ala Thr Ser Ser
            210                 215                 220

Ser Leu Glu Asn Ser Ser Ser Ala Ser Ser Leu Leu Asn
225                 230                 235
```

143

<210> 263
<211> 150
<212> PRT
<213> Homo sapiens

<400> 263
Met Glu His Lys Val Gly Pro Trp Glu His Ser Gly Glu Thr Lys Thr
1   5   10   15

Pro Ser Glu Ala Gln Glu Trp Cys Glu Asp Pro Asn Ala Leu Ala Asp
            20   25   30

Leu Lys Gln Ala Ala Leu Leu Leu Leu Ala Trp Leu Val Ser Asn Gly
        35   40   45

Arg Pro Gln Asp Leu Gly Asp Asp His Asn Ser Asp Gly Tyr Val His
    50   55   60

His His Asn Asp Gln Cys Trp Asp Gly Glu Ser Gln Gln Gly Leu Gly
65   70   75   80

Val Leu Pro Val Glu Pro Thr Asp Ile Leu Pro Arg Ile Asp Phe Pro
            85   90   95

Gly Leu Gly Gly Ser Gln Arg Asp Asp Arg Asp Gly Lys Trp Ala Ala
        100   105   110

Ile Ala Lys Thr Glu Gly Asn Gly Phe Leu Ser Gly Pro Ala Cys Phe
        115   120   125

Met Gln Asn Glu Asn Gln Ala Ile Glu Gln His Glu Ala Pro Val Ser
    130   135   140

Ala Ser Arg Arg Arg Arg
145   150

<210> 264
<211> 14
<212> PRT
<213> Homo sapiens

<400> 264
Thr Arg Pro Leu Trp Ile Pro Arg Ser Leu Val Leu Val Glu
1   5   10

<210> 265
<211> 43
<212> PRT
<213> Homo sapiens

<400> 265
Glu Lys Val Gly Leu Leu Pro Thr Thr Ile Ala Ile Ile Gln Ile Ile
1   5   10   15

Ser Lys Asp Ser Val Ser Ala Ile Ser Asp Ser Cys Leu Arg Pro Ser
            20   25   30

Glu Arg Gly Phe Gly Arg Leu Leu Lys Gln Arg
        35   40

<210> 266
<211> 211

144

<212> PRT
<213> Homo sapiens

<400> 266
Arg Gly Glu Ser Glu Glu Thr Gly Ser Ser Glu Gly Ala Pro Ser Leu
1   5   10   15

Leu Pro Ala Thr Arg Ala Pro Glu Gly Thr Arg Glu Leu Glu Ala Pro
            20   25   30

Ser Glu Asp Asn Ser Gly Arg Thr Ala Pro Ala Gly Thr Ser Val Gln
        35   40   45

Ala Gln Pro Val Leu Pro Thr Asp Ser Ala Ser Arg Gly Gly Val Ala
    50   55   60

Val Val Pro Ala Ser Gly Asp Cys Val Pro Ser Pro Cys His Asn Gly
65   70   75   80

Gly Thr Cys Leu Glu Glu Glu Gly Val Arg Cys Leu Cys Leu Pro
            85   90   95

Gly Tyr Gly Gly Asp Leu Cys Asp Val Gly Leu Arg Phe Cys Asn Pro
            100   105   110

Gly Trp Asp Ala Phe Gln Gly Ala Cys Tyr Lys His Phe Ser Thr Arg
        115   120   125

Arg Ser Trp Glu Glu Ala Glu Thr Gln Cys Arg Met Tyr Gly Ala His
    130   135   140

Leu Ala Ser Ile Ser Thr Pro Glu Glu Gln Asp Phe Ile Asn Asn Arg
145   150   155   160

Tyr Arg Glu Tyr Gln Trp Ile Gly Leu Asn Asp Arg Thr Ile Glu Gly
            165   170   175

Asp Phe Leu Trp Ser Asp Gly Val Pro Leu Leu Tyr Glu Asn Trp Asn
        180   185   190

Pro Gly Gln Pro Asp Ser Tyr Phe Leu Ser Gly Glu Asn Cys Val Val
        195   200   205

Thr Arg Ala
    210

<210> 267
<211> 42
<212> PRT
<213> Homo sapiens

<400> 267
Arg Gly Glu Ser Glu Glu Thr Gly Ser Ser Glu Gly Ala Pro Ser Leu
1   5   10   15

Leu Pro Ala Thr Arg Ala Pro Glu Gly Thr Arg Glu Leu Glu Ala Pro
            20   25   30

Ser Glu Asp Asn Ser Gly Arg Thr Ala Pro
        35   40

<210> 268
<211> 40
<212> PRT

<213> Homo sapiens

<400> 268
Ala Gly Thr Ser Val Gln Ala Gln Pro Val Leu Pro Thr Asp Ser Ala
 1   5   10   15

Ser Arg Gly Gly Val Ala Val Val Pro Ala Ser Gly Asp Cys Val Pro
            20   25   30

Ser Pro Cys His Asn Gly Gly Thr
            35   40

<210> 269
<211> 43
<212> PRT
<213> Homo sapiens

<400> 269
Cys Leu Glu Glu Glu Glu Gly Val Arg Cys Leu Cys Leu Pro Gly Tyr
 1   5   10   15

Gly Gly Asp Leu Cys Asp Val Gly Leu Arg Phe Cys Asn Pro Gly Trp
            20   25   30

Asp Ala Phe Gln Gly Ala Cys Tyr Lys His Phe
            35   40

<210> 270
<211> 43
<212> PRT
<213> Homo sapiens

<400> 270
Ser Thr Arg Arg Ser Trp Glu Glu Ala Glu Thr Gln Cys Arg Met Tyr
 1   5   10   15

Gly Ala His Leu Ala Ser Ile Ser Thr Pro Glu Glu Gln Asp Phe Ile
            20   25   30

Asn Asn Arg Tyr Arg Glu Tyr Gln Trp Ile Gly
            35   40

<210> 271
<211> 43
<212> PRT
<213> Homo sapiens

<400> 271
Leu Asn Asp Arg Thr Ile Glu Gly Asp Phe Leu Trp Ser Asp Gly Val
 1   5   10   15

Pro Leu Leu Tyr Glu Asn Trp Asn Pro Gly Gln Pro Asp Ser Tyr Phe
            20   25   30

Leu Ser Gly Glu Asn Cys Val Val Thr Arg Ala
            35   40

<210> 272
<211> 483
<212> PRT
<213> Homo sapiens

<400> 272

```
Met Ala Val Cys Ala Thr Pro Ser Ser His Pro Ala Ser Ala Val Val
1               5                   10                  15

Gly Ala Cys Leu Val Ser Arg Leu Ser Ser Ser Ser Pro Thr Arg Leu
            20              25                  30

Ala Ser Pro Ile Ser Thr Ala Ala Ser Thr Ser Thr Ala Ser Glu Thr
            35              40                  45

Arg Pro Ser Leu Ser Ala Ile Pro Glu Ala Ser Asn Pro Ala Ser Asn
    50                  55                  60

Pro Ala Ser Asp Gly Leu Glu Ala Ile Val Thr Val Thr Glu Thr Leu
65                  70                  75                  80

Glu Glu Leu Gln Leu Pro Gln Glu Ala Thr Glu Ser Glu Ser Arg Gly
            85                  90                  95

Ala Ile Tyr Ser Ile Pro Ile Met Glu Asp Gly Gly Gly Gly Ser Ser
            100                 105                 110

Thr Pro Glu Asp Pro Ala Glu Ala Pro Arg Thr Leu Leu Glu Phe Glu
    115                 120                 125

Thr Gln Ser Met Val Pro Pro Thr Gly Phe Ser Glu Glu Glu Gly Lys
    130                 135                 140

Ala Leu Glu Glu Glu Glu Lys Tyr Glu Asp Glu Glu Glu Lys Glu Glu
145                 150                 155                 160

Glu Glu Glu Glu Glu Glu Val Glu Asp Glu Ala Leu Trp Ala Trp Pro
                165                 170                 175

Ser Glu Leu Ser Ser Pro Gly Pro Glu Ala Ser Leu Pro Thr Glu Pro
            180                 185                 190

Ala Ala Gln Glu Glu Ser Leu Ser Gln Ala Pro Ala Arg Ala Val Leu
            195                 200                 205

Gln Pro Gly Ala Ser Pro Leu Pro Asp Gly Glu Ser Glu Ala Ser Arg
    210                 215                 220

Pro Pro Arg Val His Gly Pro Pro Thr Glu Thr Leu Pro Thr Pro Arg
225                 230                 235                 240

Glu Arg Asn Leu Ala Ser Pro Ser Pro Ser Thr Leu Val Glu Ala Arg
            245                 250                 255

Glu Val Gly Glu Ala Thr Gly Gly Pro Glu Leu Ser Gly Val Pro Arg
            260                 265                 270

Gly Glu Ser Glu Glu Thr Gly Ser Ser Glu Gly Ala Pro Ser Leu Leu
            275                 280                 285

Pro Ala Thr Arg Ala Pro Glu Gly Thr Arg Glu Leu Glu Ala Pro Ser
    290                 295                 300

Glu Asp Asn Ser Gly Arg Thr Ala Pro Ala Gly Thr Ser Val Gln Ala
305                 310                 315                 320

Gln Pro Val Leu Pro Thr Asp Ser Ala Ser Arg Gly Gly Val Ala Val
            325                 330                 335

Val Pro Ala Ser Gly Asp Cys Val Pro Ser Pro Cys His Asn Gly Gly
            340                 345                 350
```

Thr Cys Leu Glu Glu Glu Glu Gly Val Arg Cys Leu Cys Leu Pro Gly
        355   360   365

Tyr Gly Gly Asp Leu Cys Asp Val Gly Leu Arg Phe Cys Asn Pro Gly
    370   375   380

Trp Asp Ala Phe Gln Gly Ala Cys Tyr Lys His Phe Ser Thr Arg Arg
385   390   395   400

Ser Trp Glu Glu Ala Glu Thr Gln Cys Arg Met Tyr Gly Ala His Leu
            405   410   415

Ala Ser Ile Ser Thr Pro Glu Glu Gln Asp Phe Ile Asn Asn Arg Tyr
            420   425   430

Arg Glu Tyr Gln Trp Ile Gly Leu Asn Asp Arg Thr Ile Glu Gly Asp
    435   440   445

Phe Leu Trp Ser Asp Gly Val Pro Leu Leu Tyr Glu Asn Trp Asn Pro
    450   455   460

Gly Gln Pro Asp Ser Tyr Phe Leu Ser Gly Glu Asn Cys Val Val Thr
465   470   475   480

Arg Val Ala

<210> 273
<211> 427
<212> PRT
<213> Homo sapiens

<400> 273
Ser Ala Ile Pro Glu Ala Ser Asn Pro Ala Ser Asn Pro Ala Ser Asp
 1   5   10   15

Gly Leu Glu Ala Ile Val Thr Val Thr Glu Thr Leu Glu Glu Leu Gln
            20   25   30

Leu Pro Gln Glu Ala Thr Glu Ser Glu Ser Arg Gly Ala Ile Tyr Ser
        35   40   45

Ile Pro Ile Met Glu Asp Gly Gly Gly Gly Ser Ser Thr Pro Glu Asp
    50   55   60

Pro Ala Glu Ala Pro Arg Thr Leu Leu Glu Phe Glu Thr Gln Ser Met
65   70   75   80

Val Pro Pro Thr Gly Phe Ser Glu Glu Glu Gly Lys Ala Leu Glu Glu
            85   90   95

Glu Glu Lys Tyr Glu Asp Glu Glu Glu Lys Glu Glu Glu Glu Glu Glu
        100   105   110

Glu Glu Val Glu Asp Glu Ala Leu Trp Ala Trp Pro Ser Glu Leu Ser
    115   120   125

Ser Pro Gly Pro Glu Ala Ser Leu Pro Thr Glu Pro Ala Ala Gln Glu
    130   135   140

Glu Ser Leu Ser Gln Ala Pro Ala Arg Ala Val Leu Gln Pro Gly Ala
145   150   155   160

Ser Pro Leu Pro Asp Gly Glu Ser Glu Ala Ser Arg Pro Pro Arg Val

```
                      165                     170                     175
His Gly Pro Pro Thr Glu Thr Leu Pro Thr Pro Arg Glu Arg Asn Leu
            180             185             190

Ala Ser Pro Ser Pro Ser Thr Leu Val Glu Ala Arg Glu Val Gly Glu
        195             200             205

Ala Thr Gly Gly Pro Glu Leu Ser Gly Val Pro Arg Gly Glu Ser Glu
    210             215             220

Glu Thr Gly Ser Ser Glu Gly Ala Pro Ser Leu Leu Pro Ala Thr Arg
225             230             235             240

Ala Pro Glu Gly Thr Arg Glu Leu Glu Ala Pro Ser Glu Asp Asn Ser
            245             250             255

Gly Arg Thr Ala Pro Ala Gly Thr Ser Val Gln Ala Gln Pro Val Leu
            260             265             270

Pro Thr Asp Ser Ala Ser Arg Gly Gly Val Ala Val Val Pro Ala Ser
            275             280             285

Gly Asp Cys Val Pro Ser Pro Cys His Asn Gly Gly Thr Cys Leu Glu
    290             295             300

Glu Glu Glu Gly Val Arg Cys Leu Cys Leu Pro Gly Tyr Gly Gly Asp
305             310             315             320

Leu Cys Asp Val Gly Leu Arg Phe Cys Asn Pro Gly Trp Asp Ala Phe
            325             330             335

Gln Gly Ala Cys Tyr Lys His Phe Ser Thr Arg Arg Ser Trp Glu Glu
            340             345             350

Ala Glu Thr Gln Cys Arg Met Tyr Gly Ala His Leu Ala Ser Ile Ser
    355             360             365

Thr Pro Glu Glu Gln Asp Phe Ile Asn Asn Arg Tyr Arg Glu Tyr Gln
    370             375             380

Trp Ile Gly Leu Asn Asp Arg Thr Ile Glu Gly Asp Phe Leu Trp Ser
385             390             395             400

Asp Gly Val Pro Leu Leu Tyr Glu Asn Trp Asn Pro Gly Gln Pro Asp
            405             410             415

Ser Tyr Phe Leu Ser Gly Glu Asn Cys Val Val
            420             425
```

<210> 274
<211> 196
<212> PRT
<213> Homo sapiens

<400> 274
```
Met Ala Gln Leu Phe Leu Pro Leu Leu Ala Ala Leu Val Leu Ala Gln
  1               5               10              15

Ala Pro Ala Ala Leu Ala Asp Val Leu Glu Gly Asp Ser Ser Glu Asp
            20              25              30

Arg Ala Phe Arg Val Arg Ile Ala Gly Asp Ala Pro Leu Gln Gly Val
        35              40              45
```

```
Leu Gly Gly Ala Leu Thr Ile Pro Cys His Val His Tyr Leu Arg Pro
    50                  55                  60

Pro Pro Ser Arg Arg Ala Val Leu Gly Ser Pro Arg Val Lys Trp Thr
65              70                  75                      80

Phe Leu Ser Arg Gly Arg Glu Ala Glu Val Leu Val Ala Arg Gly Val
            85                  90                  95

Arg Val Lys Val Asn Glu Ala Tyr Arg Phe Arg Val Ala Leu Pro Ala
            100             105             110

Tyr Pro Ala Ser Leu Thr Asp Val Ser Leu Ala Leu Ser Glu Leu Arg
        115             120             125

Pro Asn Asp Ser Gly Ile Tyr Arg Cys Glu Val Gln His Gly Ile Asp
    130             135             140

Asp Ser Ser Asp Ala Val Glu Val Lys Val Lys Gly Ile Pro Ser Arg
145             150             155             160

Pro His Glu Arg Pro Val Thr Glu Thr Trp Met Ala Ser Pro Gly Ser
            165             170             175

Gly Thr Met Val Trp Trp Thr Arg Met Thr Ser Met Met Cys Thr Val
        180             185             190

Met Leu Lys Thr
        195


<210> 275
<211> 247
<212> PRT
<213> Homo sapiens

<400> 275
Met Val Gly His Ala Trp Arg Arg Arg Lys Gly Ser Ala Ala Tyr Val
 1              5                   10                      15

Cys Leu Ala Met Gly Gly Thr Cys Ala Met Leu Ala Ser Ala Ser Ala
            20                  25                  30

Thr Pro Ala Gly Thr Pro Ser Arg Ala Pro Ala Thr Ser Thr Phe Pro
        35                  40                  45

His Glu Gly Ala Gly Arg Arg Gln Arg Pro Ser Ala Gly Cys Thr Ala
    50                  55                  60

Arg Ile Trp Pro Ala Ser Ala His Pro Arg Asn Arg Thr Ser Ser Thr
65              70                  75                      80

Thr Gly Thr Gly Ser Thr Ser Gly Ser Asp Ser Thr Thr Gly Pro Ser
            85                  90                  95

Lys Ala Thr Ser Cys Gly Arg Met Ala Ser Pro Cys Ser Met Arg Thr
            100             105             110

Gly Thr Leu Gly Ser Leu Thr Ala Thr Ser Cys Leu Glu Arg Thr Ala
        115             120             125

Trp Ser Leu Val Trp His Asp Gln Gly Gln Trp Ser Asp Val Pro Cys
    130             135             140

Asn Tyr His Leu Ser Tyr Thr Cys Lys Met Gly Leu Val Ser Cys Gly
145             150             155             160
```

```
Pro Pro Pro Glu Leu Pro Leu Ala Gln Val Phe Gly Arg Pro Arg Leu
            165         170                 175

Arg Tyr Glu Val Asp Thr Val Leu Arg Tyr Arg Cys Arg Glu Gly Leu
            180             185             190

Ala Gln Arg Asn Leu Pro Leu Ile Arg Cys Gln Glu Asn Gly Arg Trp
        195             200             205

Gly Gly Pro Pro Asp Phe Leu Cys Cys Pro Glu Asp Leu Pro Glu Phe
    210             215             220

Leu Gln Pro Arg Gly Arg Asp Pro Glu Gly Thr Ser Arg Glu Val Tyr
225             230             235             240

Leu Gly Thr Phe Gly Arg Arg
            245
```

```
<210> 276
<211> 128
<212> PRT
<213> Homo sapiens

<400> 276
Ser Tyr Lys Asp Ser Leu Val Pro Arg Gln Glu Gly Gly Leu Phe Trp
  1           5               10                  15

Glu Arg Lys Gly Leu Phe Ser Cys Phe Leu Ser Cys Lys Val Ser Ser
            20              25                  30

Ser Gln Ser Gln Phe Ser Leu Cys Pro Gly Met Lys Lys Asp Ser Leu
        35              40                  45

Glu Val Arg Ser Lys Met Val Cys Leu Gly Gln Ile Ser Phe Thr Val
    50              55                  60

Leu Ala Val Ile Leu Gln Trp Gln Phe Gln Asn Phe Gly Gln Arg Pro
 65              70                  75                  80

Ser Ile Phe Leu Arg Pro His Phe Leu Phe Met Cys Val Val Ile Leu
            85                  90                  95

Leu Gln Asn Phe Leu Leu Ser Ser Ala Lys Thr Gly Leu Leu Ser His
            100             105                 110

Glu Trp Glu Arg Leu Gly Leu Gln Ala Arg Thr Arg Val Arg Lys Thr
            115             120                 125
```

```
<210> 277
<211> 86
<212> PRT
<213> Homo sapiens

<400> 277
Met Lys Lys Asp Ser Leu Glu Val Arg Ser Lys Met Val Cys Leu Gly
  1           5               10                  15

Gln Ile Ser Phe Thr Val Leu Ala Val Ile Leu Gln Trp Gln Phe Gln
            20              25                  30
```

Asn Phe Gly Gln Arg Pro Ser Ile Phe Leu Arg Pro His Phe Leu Phe
        35   40   45

Met Cys Val Val Ile Leu Leu Gln Asn Phe Leu Leu Ser Ser Ala Lys
    50   55   60

Thr Gly Leu Leu Ser His Glu Trp Glu Arg Leu Gly Leu Gln Ala Arg
 65   70   75   80

Thr Arg Val Arg Lys Thr
                85

<210> 278
<211> 81
<212> PRT
<213> Homo sapiens

<400> 278
Gly Thr Arg Ser Ser His Val Pro Ile Ser Asp Ser Lys Ser Ile Gln
 1   5   10   15

Lys Ser Glu Leu Leu Gly Leu Leu Lys Thr Tyr Asn Cys Tyr His Glu
                20   25   30

Gly Lys Ser Phe Gln Leu Arg His Arg Glu Glu Glu Gly Thr Leu Ile
            35   40   45

Ile Glu Gly Leu Leu Asn Ile Ala Trp Gly Leu Arg Arg Pro Ile Arg
    50   55   60

Leu Gln Met Gln Asp Asp Arg Glu Gln Val His Leu Pro Ser Thr Ser
 65   70   75   80

Trp

<210> 279
<211> 25
<212> PRT
<213> Homo sapiens

<400> 279
Val Pro Ile Ser Asp Ser Lys Ser Ile Gln Lys Ser Glu Leu Leu Gly
 1   5   10   15

Leu Leu Lys Thr Tyr Asn Cys Tyr His
                20   25

<210> 280
<211> 28
<212> PRT
<213> Homo sapiens

<400> 280
Phe Gln Leu Arg His Arg Glu Glu Glu Gly Thr Leu Ile Ile Glu Gly
 1   5   10   15

Leu Leu Asn Ile Ala Trp Gly Leu Arg Arg Pro Ile
                20   25

<210> 281
<211> 344

<212> PRT
<213> Homo sapiens

<400> 281
```
Gly Thr Arg Ser Ser His Val Pro Ile Ser Asp Ser Lys Ser Ile Gln
 1               5                  10                  15

Lys Ser Glu Leu Leu Gly Leu Leu Lys Thr Tyr Asn Cys Tyr His Glu
            20                  25                  30

Gly Lys Ser Phe Gln Leu Arg His Arg Glu Glu Glu Gly Thr Leu Ile
            35                  40                  45

Ile Glu Gly Leu Leu Asn Ile Ala Trp Gly Leu Arg Arg Pro Ile Arg
    50                  55                  60

Leu Gln Met Gln Asp Asp Arg Glu Gln Val His Leu Pro Ser Thr Ser
65                   70                  75                  80

Trp Met Pro Arg Arg Pro Ser Cys Pro Leu Gly Cys Trp Ser Leu Leu
            85                  90                  95

Leu Gly Leu Ser Ser Leu Ser Leu Pro Ala Ala Ile Ser Ala Leu Gln
            100                 105                 110

Leu Ser Val Phe Arg Lys Glu Pro Ser Pro Gln Asn Gly Asn Ile Thr
            115                 120                 125

Ala Gln Gly Pro Ser Ile Gln Pro Val His Lys Ala Glu Ser Ser Thr
    130                 135                 140

Asp Ser Ser Gly Pro Leu Glu Glu Ala Glu Glu Ala Pro Gln Leu Met
145                 150                 155                 160

Arg Thr Lys Ser Asp Ala Ser Cys Met Ser Gln Arg Arg Pro Lys Cys
            165                 170                 175

Arg Ala Pro Gly Glu Ala Gln Arg Ile Arg Arg His Arg Phe Ser Ile
            180                 185                 190

Asn Gly His Phe Tyr Asn His Lys Thr Ser Val Phe Thr Pro Ala Tyr
            195                 200                 205

Gly Ser Val Thr Asn Val Arg Val Asn Ser Thr Met Thr Thr Leu Gln
    210                 215                 220

Val Leu Thr Leu Leu Leu Asn Lys Phe Arg Val Glu Asp Gly Pro Ser
225                 230                 235                 240

Glu Phe Ala Leu Tyr Ile Val His Glu Ser Gly Glu Arg Thr Lys Leu
            245                 250                 255

Lys Asp Cys Glu Tyr Pro Leu Ile Ser Arg Ile Leu His Gly Pro Cys
            260                 265                 270

Glu Lys Ile Ala Arg Ile Phe Leu Met Glu Ala Asp Leu Gly Val Glu
            275                 280                 285

Val Pro His Glu Val Ala Gln Tyr Ile Lys Phe Glu Met Pro Val Leu
    290                 295                 300

Asp Ser Phe Val Glu Lys Leu Lys Glu Glu Glu Arg Glu Ile Ile
305                 310                 315                 320

Lys Leu Thr Met Lys Phe Gln Ala Leu Arg Leu Thr Met Leu Gln Arg
            325                 330                 335
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Leu Glu Gln Leu Val Glu Ala Lys
            340

<210> 282
<211> 27
<212> PRT
<213> Homo sapiens

<400> 282
Gly Cys Trp Ser Leu Leu Leu Gly Leu Ser Ser Leu Ser Leu Pro Ala
 1   5   10   15

Ala Ile Ser Ala Leu Gln Leu Ser Val Phe Arg
                20   25

<210> 283
<211> 243
<212> PRT
<213> Homo sapiens

<400> 283
Thr Arg Thr Thr Ser Cys Arg Thr Pro Ser Thr Thr Ser His Leu Pro
 1   5   10   15

Thr Ser Ser Thr Arg Ser Ser Pro Pro Trp Ser Leu Gly Pro Pro Gly
                20   25   30

Val Val Ala Pro Thr Ala Ser Pro Ala Pro Thr Ala Ser Val Ala Pro
            35   40   45

Ala Thr Thr Arg Arg Leu Ser Cys Ser Ala Leu Met Met Asn Ser Arg
    50   55   60

Cys Gly Leu Gln Trp Arg Lys Cys Trp Arg His Ser His Gly Gln Ala
65   70   75   80

Val Pro His Leu Gln Pro His His Gln Ala Arg Arg Gln Leu Ala Gln
                85   90   95

Cys Ser Arg Arg Leu Tyr Leu Leu Asp Gln Lys His Ser His Val Ala
                100   105   110

Ser Arg Gly Thr Gly Asp Ser Gln Ala Arg Pro Trp Ala Phe Arg Asn
            115   120   125

Ile Tyr Thr Trp Pro Ser Leu His Cys Pro Gly Glu Gly Arg Gly His
    130   135   140

Trp Glu Gln Gly Leu Cys Pro Cys Cys Pro Ser Cys Ala Gly Gly Met
145   150   155   160

Leu Gly Pro Ala Ala Pro Arg Pro Gln Cys Leu Cys Val Asp Gln Arg
            165   170   175

Leu Gln Pro Ser Ser Pro Ser Ser Pro Arg Asp Ser Gln Ala Glu Val
            180   185   190

Gly Lys Pro Trp Leu Pro His Thr Pro Cys Asn Thr Leu Ser Asp Leu
            195   200   205

Gly Ser Ser Arg Leu His Pro Phe Pro Val His Leu Cys Pro Val Leu
    210   215   220

Asp Ser Pro His Pro Gly Gln Glu Trp Gly Cys Gly Arg Ser Val Val
225   230   235   240

Leu Pro Ser

<210> 284
<211> 162
<212> PRT
<213> Homo sapiens

<400> 284
Ile Leu Gly Ala Gly Cys Ser Gly Gly Ser Ala Gly Ala Ile Ala Thr
 1   5   10   15

Val Arg Leu Cys Pro Thr Ser Ser Leu Thr Thr Arg Pro Gly Gly Ser
            20   25   30

Trp His Ser Ala His Ala Ala Phe Ile Tyr Trp Thr Arg Asn Thr His
        35   40   45

Met Ser Leu Pro Glu Glu Arg Gly Thr Ala Arg Leu Ala His Gly Pro
    50   55   60

Ser Gly Ile Phe Ile His Gly Pro Ala Cys Thr Ala Arg Ala Arg Ala
65   70   75   80

Glu Asp Thr Gly Ser Lys Ala Tyr Ala Pro Ala Ala Arg Pro Val Leu
                85   90   95

Gly Ala Cys Trp Asp Gln Pro His Pro Gly Pro Asn Ala Cys Val Trp
            100   105   110

Thr Ser Gly Cys Ser Leu Leu Ala Pro Pro Arg Glu Thr Leu Arg
            115   120   125

Leu Arg Ser Ala Ser Arg Gly Ser Pro Thr His Arg Ala Ile Pro Cys
    130   135   140

Leu Thr Trp Ala Leu Pro Ala Cys Ile Pro Ser Leu Ser Thr Phe Val
145   150   155   160

Gln Cys

<210> 285
<211> 35
<212> PRT
<213> Homo sapiens

<400> 285
Thr Arg Thr Thr Ser Cys Arg Thr Pro Ser Thr Thr Ser His Leu Pro
 1   5   10   15

Thr Ser Ser Thr Arg Ser Ser Pro Pro Trp Ser Leu Gly Pro Pro Gly
            20   25   30

Val Val Ala
        35

<210> 286
<211> 36
<212> PRT

<213> Homo sapiens

<400> 286
Pro Thr Ala Ser Pro Ala Pro Thr Ala Ser Val Ala Pro Ala Thr Thr
 1   5   10   15

Arg Arg Leu Ser Cys Ser Ala Leu Met Met Asn Ser Arg Cys Gly Leu
            20   25   30

Gln Trp Arg Lys
            35

<210> 287
<211> 36
<212> PRT
<213> Homo sapiens

<400> 287
Cys Trp Arg His Ser His Gly Gln Ala Val Pro His Leu Gln Pro His
 1   5   10   15

His Gln Ala Arg Arg Gln Leu Ala Gln Cys Ser Arg Arg Leu Tyr Leu
            20   25   30

Leu Asp Gln Lys
            35

<210> 288
<211> 35
<212> PRT
<213> Homo sapiens

<400> 288
His Ser His Val Ala Ser Arg Gly Thr Gly Asp Ser Gln Ala Arg Pro
 1   5   10   15

Trp Ala Phe Arg Asn Ile Tyr Thr Trp Pro Ser Leu His Cys Pro Gly
            20   25   30

Glu Gly Arg
            35

<210> 289
<211> 36
<212> PRT
<213> Homo sapiens

<400> 289
Gly His Trp Glu Gln Gly Leu Cys Pro Cys Cys Pro Ser Cys Ala Gly
 1   5   10   15

Gly Met Leu Gly Pro Ala Ala Pro Arg Pro Gln Cys Leu Cys Val Asp
            20   25   30

Gln Arg Leu Gln
            35

<210> 290
<211> 35
<212> PRT
<213> Homo sapiens

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         20                    25                    30
Pro Asn


<210> 295
<211> 54
<212> PRT
<213> Homo sapiens

<400> 295
Ala Cys Val Trp Thr Ser Gly Cys Ser Leu Leu Ala Pro Pro Pro Arg
  1               5                  10                  15

Glu Thr Leu Arg Leu Arg Ser Ala Ser Arg Gly Ser Pro Thr His Arg
             20                  25                  30

Ala Ile Pro Cys Leu Thr Trp Ala Leu Pro Ala Cys Ile Pro Ser Leu
         35                  40                  45

Ser Thr Phe Val Gln Cys
     50


<210> 296
<211> 184
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 296
Met Met Asn Ser Arg Cys Gly Leu Gln Trp Arg Lys Cys Trp Arg His
  1               5                  10                  15

Ser His Gly Gln Ala Val Pro His Leu Gln Pro His His Gln Ala Arg
             20                  25                  30

Arg Gln Leu Ala Gln Cys Ser Arg Arg Leu Tyr Leu Leu Asp Gln Lys
             35                  40                  45

His Ser His Val Ala Ser Arg Gly Thr Gly Asp Ser Gln Ala Arg Pro
     50                  55                  60

Trp Ala Phe Arg Asn Ile Tyr Thr Trp Pro Ser Leu His Cys Pro Gly
 65                  70                  75                  80

Glu Gly Arg Gly His Trp Glu Gln Gly Leu Cys Pro Cys Cys Pro Ser
             85                  90                  95

Cys Ala Gly Gly Met Leu Gly Pro Ala Ala Pro Arg Pro Gln Cys Leu
            100                 105                 110

Cys Val Asp Gln Arg Leu Gln Pro Ser Ser Pro Ser Ser Pro Arg Asp
            115                 120                 125

Ser Gln Ala Glu Val Gly Lys Pro Trp Leu Pro His Thr Pro Cys Asn
    130                 135                 140

Thr Leu Ser Asp Leu Gly Ser Ser Arg Leu His Pro Xaa Pro Val His
145                 150                 155                 160
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Leu Cys Pro Val Leu Asp Ser Pro His Pro Gly Gln Glu Trp Gly Cys
                165   170   175

Gly Arg Ser Val Val Leu Pro Ser
            180

<210> 297
<211> 278
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (183)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (186)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 297
Ile Arg Gln Ser Leu Gly Gly Glu Ser Ser Ile Met Ser Glu Ile Arg
  1   5   10   15

Gly Lys Pro Ile Glu Ser Ser Cys Met Tyr Gly Thr Cys Cys Leu Trp
            20   25   30

Gly Lys Thr Tyr Ser Ile Gly Phe Leu Arg Phe Cys Lys Gln Ala Thr
        35   40   45

Leu Gln Phe Cys Val Val Lys Pro Leu Met Ala Val Ser Thr Val Val
    50   55   60

Leu Gln Ala Phe Gly Lys Tyr Arg Asp Gly Asp Phe Asp Val Thr Ser
65   70   75   80

Gly Tyr Leu Tyr Val Thr Ile Ile Tyr Asn Ile Ser Val Ser Leu Ala
            85   90   95

Leu Tyr Ala Leu Phe Leu Phe Tyr Phe Ala Thr Arg Glu Leu Leu Ser
            100   105   110

Pro Tyr Ser Pro Val Leu Lys Phe Phe Met Val Lys Ser Val Ile Phe
        115   120   125

Leu Ser Phe Trp Gln Gly Met Leu Leu Ala Ile Leu Glu Lys Cys Gly
    130   135   140

Ala Ile Pro Lys Ile His Ser Ala Arg Val Ser Val Gly Glu Gly Thr
145   150   155   160

Val Ala Ala Gly Tyr Gln Asp Phe Ile Ile Cys Val Glu Met Phe Phe
            165   170   175

Ala Ala Leu Ala Leu Arg Xaa Ala Phe Xaa Tyr Lys Val Tyr Ala Asp
            180   185   190

Lys Arg Leu Asp Ala Gln Gly Arg Cys Ala Pro Met Lys Ser Ile Ser
        195   200   205

Ser Ser Leu Lys Glu Thr Met Asn Pro His Asp Ile Val Gln Asp Ala
    210   215   220

Ile His Asn Phe Ser Pro Ala Tyr Gln Gln Tyr Thr Gln Gln Ser Thr

225   230   235   240

Leu Glu Pro Gly Pro Thr Trp Arg Gly Gly Ala His Gly Leu Ser Arg
                245   250   255

Ser His Ser Leu Ser Gly Ala Arg Asp Asn Glu Lys Thr Leu Leu Leu
            260   265   270

Ser Ser Asp Asp Glu Phe
        275

<210> 298
<211> 46
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 298
Pro His Arg Pro Pro Thr Pro Gln Ser Asn Phe Ser Ser His Pro Ser
  1   5   10   15

Ser Gln Ala Leu Thr Ile Leu Lys Arg Leu Val Gly Thr Leu Leu Ser
            20   25   30

Ala Thr Gly Lys Leu Val Arg Ala Arg Xaa Arg Ala Trp Gly
            35   40   45

<210> 299
<211> 102
<212> PRT
<213> Homo sapiens

<400> 299
Gly Val Met Arg Leu Arg Thr Arg Gln Lys Ser Arg Arg Gln Arg Lys
  1   5   10   ⌡   15

Glu Lys Met Ser Arg Arg Lys Ser Lys Arg Lys Met Lys Arg Lys Arg
                20   25   30

Arg Arg Arg Gln Arg Ala Arg Gly Gln Ser Gln Pro Met Arg Leu Ser
            35   40   45

Phe His Pro Phe Pro Thr Leu Val Phe Phe Gln Val Leu Thr Gln Ser
    50   55   60

Trp Val Leu Ser Ser Arg Arg Gln Leu Leu Val Val Arg Ala Gly Pro
 65   70   75   80

His Pro Pro Trp Pro Leu Phe Asp Leu Pro His Ser Val Thr Pro Gln
            85   90   95

Ala Ser His Thr Ser Val
            100

<210> 300
<211> 43
<212> PRT
<213> Homo sapiens

<400> 300
Met Lys Arg Lys Arg Arg Arg Arg Gln Arg Ala Arg Gly Gln Ser Gln
1   5   10   15

Pro Met Arg Leu Ser Phe His Pro Phe Pro Thr Leu Val Phe Phe Gln
            20   25   30

Val Leu Thr Gln Ser Trp Val Leu Ser Ser Arg
        35   40

<210> 301
<211> 32
<212> PRT
<213> Homo sapiens

<400> 301
Arg Gln Leu Leu Val Val Arg Ala Gly Pro His Pro Pro Trp Pro Leu
1   5   10   15

Phe Asp Leu Pro His Ser Val Thr Pro Gln Ala Ser His Thr Ser Val
            20   25   30

<210> 302
<211> 52
<212> PRT
<213> Homo sapiens

<400> 302
His His Cys Pro Ala Leu Gln Pro Gly Thr His Thr His Thr His Thr
1   5   10   15

His Thr His Thr His Thr Arg Arg Gly Met Cys Leu Val Gln Ile Tyr
            20   25   30

Ile Lys Leu Thr His Arg Gln Ile Pro Cys Leu Cys Leu Leu Gly Pro
        35   40   45

Asp Ser Ala Val
    50

<210> 303
<211> 8
<212> PRT
<213> Homo sapiens

<400> 303
His Glu Ile Leu Gln Pro Ala Val
1   5

<210> 304
<211> 54
<212> PRT
<213> Homo sapiens

<400> 304
Asn Ser Arg Val Asp Pro Arg Val Arg Asp Gly Leu Met Tyr Gln Lys
1   5   10   15

Phe Arg Asn Gln Phe Leu Ser Phe Ser Met Tyr Gln Ser Phe Val Gln

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                    20                    25                     30
Phe Leu Gln Tyr Tyr Tyr Gln Ser Gly Cys Leu Tyr Arg Leu Arg Ala
            35                   40                   45

Leu Gly Glu Arg His Thr
        50
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<210> 305
<211> 116
<212> PRT
<213> Homo sapiens

<400> 305
Met Tyr Gln Ser Phe Val Gln Phe Leu Gln Tyr Tyr Gln Ser Gly
 1               5                  10                  15

Cys Leu Tyr Arg Leu Arg Ala Leu Gly Glu Arg His Thr Met Asp Leu
            20                   25                   30

Thr Val Glu Gly Phe Gln Ser Trp Met Trp Arg Gly Leu Thr Phe Leu
            35                   40                   45

Leu Pro Phe Leu Phe Phe Gly His Phe Trp Gln Leu Phe Asn Ala Leu
        50                   55                   60

Thr Leu Phe Asn Leu Ala Gln Asp Pro Gln Cys Lys Glu Trp Gln Val
65                   70                   75                   80

Leu Met Cys Gly Phe Pro Phe Leu Leu Leu Phe Leu Gly Asn Phe Phe
                    85                   90                   95

Thr Thr Leu Arg Val Val His His Lys Phe His Ser Gln Arg His Gly
            100                  105                  110

Ser Lys Lys Asp
        115
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<210> 306
<211> 9
<212> PRT
<213> Homo sapiens

<400> 306
Ile Leu Met Pro Phe Cys Gly Leu His
 1               5
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<210> 307
<211> 72
<212> PRT
<213> Homo sapiens

<400> 307
Met Pro Phe Cys Gly Leu His Met Ala Ser Pro Ser Ile Ile Leu Leu
 1               5                  10                  15

Leu Ile Phe Phe Phe Phe Phe Phe Phe Ser Val Cys Ser Val Ser Gln
            20                   25                   30

Tyr Met Phe Glu Asn Glu Cys Glu Ser Met Ser Arg Arg Arg Gly Arg
            35                   40                   45

Gly Leu Gly Arg Ser Arg Leu Lys Val Glu Gln Gly Pro Asp Ala Asp
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                50                      55                      60

Leu His Pro Arg Thr Leu Gly Ser
 65                  70


<210> 308
<211> 17
<212> PRT
<213> Homo sapiens

<400> 308
Leu Pro Leu Val Leu Pro Pro Thr Pro Pro Pro Trp Leu Pro Ser
 1               5               10                  15

Leu



<210> 309
<211> 220
<212> PRT
<213> Homo sapiens

<400> 309
Thr Thr Met Tyr Ala Leu Trp Arg Thr Gly Pro Thr Thr Ser Pro Ala
 1               5                   10                  15

Leu Leu Thr Leu Leu Ser Lys Gly Val Pro Arg Pro Ala Ala Pro Trp
             20                  25                  30

Thr Met Ser Pro Ser Ser Val Ala Leu Ile Cys Leu Leu Arg Tyr Gly
                 35                  40                  45

Gln Leu Leu Glu Gln Ser Arg His Ser Trp Val Asn Thr Thr Ala Leu
         50                  55                  60

Ile Thr Gly Cys Thr Asn Ala Ala Gly Leu Leu Val Val Gly Asn Phe
 65                  70                  75                  80

Gln Val Asp His Ala Arg Ser Leu His Tyr Val Gly Ala Gly Val Ala
                 85                  90                  95

Phe Pro Ala Gly Leu Leu Phe Val Cys Leu His Cys Ala Leu Ser Tyr
             100                 105                 110

Gln Gly Ala Thr Ala Pro Leu Asp Leu Ala Val Ala Tyr Leu Arg Ser
             115                 120                 125

Val Leu Ala Val Ile Ala Phe Ile Thr Leu Val Leu Ser Gly Val Phe
         130                 135                 140

Phe Val His Glu Ser Ser Gln Leu Gln His Gly Ala Ala Leu Cys Glu
145                 150                 155                 160

Trp Val Cys Val Ile Asp Ile Leu Ile Phe Tyr Gly Thr Phe Ser Tyr
                 165                 170                 175

Glu Phe Gly Ala Val Ser Ser Asp Thr Leu Val Ala Ala Leu Gln Pro
             180                 185                 190

Thr Pro Gly Arg Ala Cys Lys Ser Ser Gly Ser Ser Ser Thr Ser Thr
             195                 200                 205

His Leu Asn Cys Ala Pro Glu Ser Ile Ala Met Ile
         210                 215                 220
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<210> 310
<211> 37
<212> PRT
<213> Homo sapiens

<400> 310
Thr Thr Met Tyr Ala Leu Trp Arg Thr Gly Pro Thr Thr Ser Pro Ala
 1   5   10   15

Leu Leu Thr Leu Leu Ser Lys Gly Val Pro Arg Pro Ala Ala Pro Trp
            20   25   30

Thr Met Ser Pro Ser
         35

<210> 311
<211> 34
<212> PRT
<213> Homo sapiens

<400> 311
Ser Val Ala Leu Ile Cys Leu Leu Arg Tyr Gly Gln Leu Leu Glu Gln
 1   5   10   15

Ser Arg His Ser Trp Val Asn Thr Thr Ala Leu Ile Thr Gly Cys Thr
            20   25   30

Asn Ala

<210> 312
<211> 37
<212> PRT
<213> Homo sapiens

<400> 312
Ala Gly Leu Leu Val Val Gly Asn Phe Gln Val Asp His Ala Arg Ser
 1   5   10   15

Leu His Tyr Val Gly Ala Gly Val Ala Phe Pro Ala Gly Leu Leu Phe
            20   25   30

Val Cys Leu His Cys
         35

<210> 313
<211> 34
<212> PRT
<213> Homo sapiens

<400> 313
Ala Leu Ser Tyr Gln Gly Ala Thr Ala Pro Leu Asp Leu Ala Val Ala
 1   5   10   15

Tyr Leu Arg Ser Val Leu Ala Val Ile Ala Phe Ile Thr Leu Val Leu
            20   25   30

Ser Gly

<210> 314
<211> 41
<212> PRT
<213> Homo sapiens

<400> 314
Val Phe Phe Val His Glu Ser Ser Gln Leu Gln His Gly Ala Ala Leu
1   5   10   15

Cys Glu Trp Val Cys Val Ile Asp Ile Leu Ile Phe Tyr Gly Thr Phe
                20   25   30

Ser Tyr Glu Phe Gly Ala Val Ser Ser
            35   40

<210> 315
<211> 37
<212> PRT
<213> Homo sapiens

<400> 315
Asp Thr Leu Val Ala Ala Leu Gln Pro Thr Pro Gly Arg Ala Cys Lys
1   5   10   15

Ser Ser Gly Ser Ser Ser Thr Ser Thr His Leu Asn Cys Ala Pro Glu
                20   25   30

Ser Ile Ala Met Ile
            35

<210> 316
<211> 177
<212> PRT
<213> Homo sapiens

<400> 316
Ser Ala Ser Cys Ala Thr Gly Ser Ser Trp Ser Arg Val Gly Thr Leu
  1   5   10   15

Gly Leu Thr Pro Arg His Ser Ser Gln Ala Ala Pro Thr Leu Arg Ala
                20   25   30

Ser Trp Trp Leu Ala Thr Phe Arg Trp Ile Met Pro Gly Leu Cys Thr
            35   40   45

Thr Leu Glu Leu Ala Trp Pro Ser Leu Arg Gly Cys Ser Leu Phe Ala
    50   55   60

Cys Thr Val Leu Ser Pro Thr Lys Gly Pro Pro Pro Arg Trp Thr Trp
65   70   75   80

Leu Trp Pro Ile Cys Glu Val Cys Trp Leu Ser Ser Pro Leu Ser Pro
                85   90   95

Trp Ser Ser Val Glu Ser Ser Leu Ser Met Arg Val Leu Ser Cys Asn
            100   105   110

Met Gly Gln Pro Cys Val Ser Gly Cys Val Ser Ser Ile Ser Ser Phe
            115   120   125

Ser Met Ala Pro Ser Ala Thr Ser Leu Gly Gln Ser Pro Gln Thr His
    130   135   140

Trp Trp Leu His Cys Ser Leu Pro Leu Ala Gly Pro Ala Ser Pro Pro

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145                     150              155                  160
Gly Ala Ala Ala Pro Pro Pro Thr Ser Thr Val Pro Pro Arg Ala Ser
              165             170             175
Leu
      .
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<210> 317
<211> 38
<212> PRT
<213> Homo sapiens

<400> 317
Ser Ala Ser Cys Ala Thr Gly Ser Ser Trp Ser Arg Val Gly Thr Leu
1               5               10              15
Gly Leu Thr Pro Arg His Ser Ser Gln Ala Ala Pro Thr Leu Arg Ala
            20              25              30
Ser Trp Trp Leu Ala Thr
          35
```

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<210> 318
<211> 33
<212> PRT
<213> Homo sapiens

<400> 318
Phe Arg Trp Ile Met Pro Gly Leu Cys Thr Thr Leu Glu Leu Ala Trp
1               5               10              15
Pro Ser Leu Arg Gly Cys Ser Leu Phe Ala Cys Thr Val Leu Ser Pro
            20              25              30
Thr
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<210> 319
<211> 36
<212> PRT
<213> Homo sapiens

<400> 319
Lys Gly Pro Pro Pro Arg Trp Thr Trp Leu Trp Pro Ile Cys Glu Val
1               5               10              15
Cys Trp Leu Ser Ser Pro Leu Ser Pro Trp Ser Ser Val Glu Ser Ser
            20              25              30
Leu Ser Met Arg
          35
```

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<210> 320
<211> 35
<212> PRT
<213> Homo sapiens

<400> 320
Val Leu Ser Cys Asn Met Gly Gln Pro Cys Val Ser Gly Cys Val Ser
1               5               10              15
```

Ser Ile Ser Ser Phe Ser Met Ala Pro Ser Ala Thr Ser Leu Gly Gln
            20   25   30

Ser Pro Gln
        35

<210> 321
<211> 35
<212> PRT
<213> Homo sapiens

<400> 321
Thr His Trp Trp Leu His Cys Ser Leu Pro Leu Ala Gly Pro Ala Ser
  1   5   10   15

Pro Pro Gly Ala Ala Ala Pro Pro Pro Thr Ser Thr Val Pro Pro Arg
            20   25   30

Ala Ser Leu
        35

<210> 322
<211> 218
<212> PRT
<213> Homo sapiens

<400> 322
Met Tyr Ala Leu Trp Arg Thr Gly Pro Thr Thr Ser Pro Ala Leu Leu
  1   5   10   15

Thr Leu Leu Ser Lys Gly Val Pro Arg Pro Ala Ala Pro Trp Thr Met
            20   25   30

Ser Pro Ser Ser Val Ala Leu Ile Cys Leu Leu Arg Tyr Gly Gln Leu
            35   40   45

Leu Glu Gln Ser Arg His Ser Trp Val Asn Thr Thr Ala Leu Ile Thr
    50   55   60

Gly Cys Thr Asn Ala Ala Gly Leu Leu Val Val Gly Asn Phe Gln Val
 65   70   75   80

Asp His Ala Arg Ser Leu His Tyr Val Gly Ala Gly Val Ala Phe Pro
                85   90   95

Ala Gly Leu Leu Phe Val Cys Leu His Cys Ala Leu Ser Tyr Gln Gly
            100   105   110

Ala Thr Ala Pro Leu Asp Leu Ala Val Ala Tyr Leu Arg Ser Val Leu
            115   120   125

Ala Val Ile Ala Phe Ile Thr Leu Val Leu Ser Gly Val Phe Phe Val
    130   135   140

His Glu Ser Ser Gln Leu Gln His Gly Ala Ala Leu Cys Glu Trp Val
145   150   155   160

Cys Val Ile Asp Ile Leu Ile Phe Tyr Gly Thr Phe Ser Tyr Glu Phe
                165   170   175

Gly Ala Val Ser Ser Asp Thr Leu Val Ala Ala Leu Gln Pro Thr Pro
            180   185   190

Gly Arg Ala Cys Lys Ser Ser Gly Ser Ser Ser Thr Ser Thr His Leu

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                195                      200                      205
Asn Cys Ala Pro Glu Ser Ile Ala Met Ile
    210                 215
```

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<210> 323
<211> 187
<212> PRT
<213> Homo sapiens

<400> 323
Met Ser Pro Ser Ser Val Ala Leu Ile Cys Leu Leu Arg Tyr Gly Gln
1               5                   10                  15

Leu Leu Glu Gln Ser Arg His Ser Trp Val Asn Thr Thr Ala Leu Ile
            20                  25                  30

Thr Gly Cys Thr Asn Ala Ala Gly Leu Leu Val Val Gly Asn Phe Gln
        35                  40                  45

Val Asp His Ala Arg Ser Leu His Tyr Val Gly Ala Gly Val Ala Phe
    50                  55                  60

Pro Ala Gly Leu Leu Phe Val Cys Leu His Cys Ala Leu Ser Tyr Gln
65                  70                  75                      80

Gly Ala Thr Ala Pro Leu Asp Leu Ala Val Ala Tyr Leu Arg Ser Val
            85                  90                  95

Leu Ala Val Ile Ala Phe Ile Thr Leu Val Leu Ser Gly Val Phe Phe
            100                 105                 110

Val His Glu Ser Ser Gln Leu Gln His Gly Ala Ala Leu Cys Glu Trp
        115                 120                 125

Val Cys Val Ile Asp Ile Leu Ile Phe Tyr Gly Thr Phe Ser Tyr Glu
    130                 135                 140

Phe Gly Ala Val Ser Ser Asp Thr Leu Val Ala Ala Leu Gln Pro Thr
145                 150                 155                 160

Pro Gly Arg Ala Cys Lys Ser Ser Gly Ser Ser Ser Thr Ser Thr His
                165                 170                 175

Leu Asn Cys Ala Pro Glu Ser Ile Ala Met Ile
            180                 185
```

```
<210> 324
<211> 67
<212> PRT
<213> Homo sapiens

<400> 324
Met Thr Ala Trp Ile Leu Leu Pro Val Ser Leu Ser Ala Phe Ser Ile
1               5                   10                  15

Thr Gly Ile Trp Thr Val Tyr Ala Met Ala Val Met Asn His His Val
            20                  25                  30

Cys Pro Val Glu Asn Trp Ser Tyr Asn Glu Ser Cys Pro Pro Asp Pro
        35                  40                  45

Ala Glu Gln Gly Gly Pro Lys Thr Cys Cys Thr Leu Asp Asp Val Pro
    50                  55                  60
```

Leu Ile Ser
 65

<210> 325
<211> 135
<212> PRT
<213> Homo sapiens

<400> 325
Met Pro Gly Leu Cys Thr Thr Leu Glu Leu Ala Trp Pro Ser Leu Arg
 1   5   10   15

Gly Cys Ser Leu Phe Ala Cys Thr Val Leu Ser Pro Thr Lys Gly Pro
                20   25   30

Pro Pro Arg Trp Thr Trp Leu Trp Pro Ile Cys Glu Val Cys Trp Leu
            35   40   45

Ser Ser Pro Leu Ser Pro Trp Ser Ser Val Glu Ser Ser Leu Ser Met
        50   55   60

Arg Val Leu Ser Cys Asn Met Gly Gln Pro Cys Val Ser Gly Cys Val
 65   70   75   80

Ser Ser Ile Ser Ser Phe Ser Met Ala Pro Ser Ala Thr Ser Leu Gly
                85   90   95

Gln Ser Pro Gln Thr His Trp Trp Leu His Cys Ser Leu Pro Leu Ala
            100   105   110

Gly Pro Ala Ser Pro Pro Gly Ala Ala Ala Pro Pro Pro Thr Ser Thr
        115   120   125

Val Pro Pro Arg Ala Ser Leu
    130   135

<210> 326
<211> 15
<212> PRT
<213> Homo sapiens

<400> 326
Ser Cys His Ser Gly Gln Gln Ser Glu Thr Val Ser Glu Lys Lys
 1   5   10   15

<210> 327
<211> 15
<212> PRT
<213> Homo sapiens

<400> 327
Ser Pro Pro Ile Ser Phe Thr Leu Thr Ser Gly Leu Pro Asn Pro
 1   5   10   15

<210> 328
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 328
Gln Phe His Thr Gly Asn Ser Tyr Asp His Asp Tyr Ala Lys Xaa Xaa
1   5   10   15

Tyr Gly Asn Leu Tyr Tyr Arg Xaa Ser Trp Tyr Ala Cys Arg Tyr Arg
        20   25   30

Ser Gly Ile Pro Gly Ser Thr His Ala Ser Glu Lys Ile Phe Leu Ser
        35   40   45

Lys Leu Ile Val Cys Phe Leu Ser Thr Trp Leu Pro Phe Val Leu Leu
    50   55   60

Gln Val Ile Ile Val Xaa Leu Lys Val Gln Ile Pro Ala Tyr Ile Glu
65   70   75   80

<210> 329
<211> 21
<212> PRT
<213> Homo sapiens

<400> 329
Ile Pro Ile Arg Phe Val Asn Ile Phe Phe His Ser Ala Gly Cys Leu
1   5   10   15

Phe Ile Phe Leu Ile
            20

<210> 330
<211> 655
<212> PRT
<213> Homo sapiens

<400> 330
Tyr Arg Ile Pro Leu Ala Ala Asp Ala Gly Leu Leu Gln Phe Leu Gln
1   5   10   15

Glu Phe Ser Gln Gln Thr Ile Ser Arg Thr His Glu Ile Lys Lys Gln
            20   25   30

Val Asp Gly Leu Ile Arg Glu Thr Lys Ala Thr Asp Cys Arg Leu His
        35   40   45

Asn Val Phe Asn Asp Phe Leu Met Leu Ser Asn Thr Gln Phe Ile Glu
    50   55   60

Asn Arg Val Tyr Asp Glu Glu Val Glu Glu Pro Val Leu Lys Ala Glu
65   70   75   80

Ala Glu Lys Thr Glu Gln Glu Lys Thr Arg Glu Gln Lys Glu Val Asp
             85   90   95

Leu Ile Pro Lys Val Gln Glu Ala Val Asn Tyr Gly Leu Gln Val Leu
          100   105   110

Asp Ser Ala Phe Glu Gln Leu Asp Ile Lys Ala Gly Asn Ser Asp Ser
        115   120   125

Glu Glu Asp Asp Ala Asn Gly Arg Val Glu Leu Ile Leu Glu Pro Lys
    130   135   140

Asp Leu Tyr Ile Asp Arg Pro Leu Pro Tyr Leu Ile Gly Ser Lys Leu
145   150   155   160

Phe Met Glu Gln Glu Asp Val Gly Leu Gly Glu Leu Ser Ser Glu Glu
        165   170   175

Gly Ser Val Gly Ser Asp Arg Gly Ser Ile Val Asp Thr Glu Glu Glu
        180   185   190

Lys Glu Glu Glu Glu Ser Asp Glu Asp Phe Ala His His Ser Asp Asn
        195   200   205

Glu Gln Asn Gln His Thr Thr Gln Met Ser Asp Glu Glu Glu Asp Asp
    210   215   220

Asp Gly Cys Asp Leu Phe Ala Asp Ser Glu Lys Glu Glu Glu Asp Ile
225   230   235   240

Glu Asp Ile Glu Glu Asn Thr Arg Pro Lys Arg Ser Arg Pro Thr Ser
        245   250   255

Phe Ala Asp Glu Leu Ala Ala Arg Ile Lys Gly Asp Ala Met Gly Arg.
        260   265   270

Val Asp Glu Glu Pro Thr Thr Leu Pro Ser Gly Glu Ala Lys Pro Arg
        275   280   285

Lys Thr Leu Lys Glu Lys Lys Glu Arg Arg Thr Pro Ser Asp Asp Glu
    290   295   300

Glu Asp Asn Leu Phe Ala Pro Pro Lys Leu Thr Asp Glu Asp Phe Ser
305   310   315   320

Pro Phe Gly Ser Gly Gly Gly Leu Phe Ser Gly Gly Lys Gly Leu Phe
          325   330   335

Asp Asp Glu Asp Glu Glu Ser Asp Leu Phe Met Glu Ala Pro Gln Asp
        340   345   350

Arg Gln Ala Gly Ala Ser Val Lys Glu Glu Ser Ser Ser Ser Lys Pro
        355   360   365

Gly Lys Lys Ile Pro Ala Gly Ala Val Ser Val Phe Leu Gly Asp Thr
    370   375   380

Asp Val Phe Gly Ala Ala Ser Val Pro Ser Leu Lys Glu Pro Gln Lys
385   390   395   400

Pro Glu Gln Pro Thr Pro Arg Lys Ser Pro Tyr Gly Pro Pro Pro Thr
            405   410   415

Gly Leu Phe Asp Asp Asp Asp Gly Asp Asp Asp Asp Phe Phe Ser
        420   425   430

Ala Pro His Ser Lys Pro Ser Lys Thr Arg Lys Val Gln Ser Thr Ala
        435   440   445

Asp Ile Phe Gly Asp Glu Glu Gly Asp Leu Phe Lys Glu Lys Ala Val
    450   455   460

Ala Ser Pro Glu Ala Thr Val Ser Gln Thr Asp Glu Asn Lys Ala Arg
465   470   475   480

Ala Glu Lys Lys Asp Leu Phe Ser Ser Gln Ser Ala Ser Asn Leu Lys
            485   490   495

Gly Ala Ser Leu Leu Pro Gly Lys Leu Pro Thr Ser Val Ser Leu Phe
        500   505   510

Asp Asp Glu Asp Glu Glu Asp Asn Leu Phe Gly Gly Thr Ala Ala Lys
        515   520   525

Lys Gln Thr Leu Ser Leu Gln Ala Gln Arg Glu Glu Lys Ala Lys Ala
    530   535   540

Ser Glu Leu Ser Lys Lys Lys Ala Ser Ala Leu Leu Phe Ser Ser Asp
545   550   555   560

Glu Glu Asp Gln Trp Asn Ile Pro Ala Ser Gln Thr His Leu Ala Ser
            565   570   575

Asp Ser Arg Ser Lys Gly Glu Pro Arg Asp Ser Gly Thr Leu Gln Ser
        580   585   590

Gln Glu Ala Lys Ala Val Lys Lys Thr Ser Leu Phe Glu Glu Asp Lys
    595   600   605

Glu Asp Asp Leu Phe Ala Ile Ala Lys Asp Ser Gln Lys Lys Thr Gln
    610   615   -   620

Arg Val Ser Leu Leu Phe Glu Asp Asp Val Asp Ser Gly Gly Ser Leu
625   630   635   640

Phe Gly Ser Pro Pro Thr Ser Val Pro Pro Ala Thr Lys Lys Lys
            645   650   655

<210> 331
<211> 182
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 331
Phe Leu Pro Asp His Pro Ala Lys Pro Ser Ser Leu Val His Ser
 1   5   10   15

Pro Phe Val Phe Gly Xaa Pro Leu Ser Phe Gln Gln Pro Gln Leu Gln
            20   25   30

```
Lys Ser Pro Ser Arg Asn Leu Ala Ser Arg Glu Arg Ile Tyr Lys Asn
        35                  40                  45

Tyr Gly Val Ala Gly Pro Ala Ser Ala Leu Ser Ser Leu Ser His Lys
    50                  55                  60

Leu Lys Gly Asp Arg Gly Asn Ile Ser Thr Ser Ser Lys Pro Ala Ser
65                  70                  75                  80

Thr Ser Gly Lys Ser Glu Leu Ser Ser Lys His Ser Arg Ser Leu Lys
            85                  90                  95

Pro Asp Gly Arg Met Ser Arg Thr Thr Ala Asp Gln Lys Lys Pro Arg
            100             105             110

Gly Thr Glu Ser Leu Ser Ala Ser Glu Ser Leu Ile Leu Lys Ser Asp
        115             120             125

Ala Ala Lys Leu Arg Ser Asp Ser His Ser Arg Ser Leu Ser Pro Asn
    130             135             140

His Asn Thr Leu Gln Thr Leu Lys Ser Asp Gly Arg Met Pro Ser Ser
145     \           150             155             160

Ser Arg Ala Glu Ser Pro Gly Pro Gly Ser Arg Leu His Leu Leu Ser
            165             170             175

Gln Arg Leu Ser Gln Gln
            180
```

```
<210> 332
<211> 60
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 332
Phe Leu Pro Asp His Pro Ala Lys Pro Pro Ser Ser Leu Val His Ser
 1               5               10                  15

Pro Phe Val Phe Gly Xaa Pro Leu Ser Phe Gln Gln Pro Gln Leu Gln
            20                  25                  30

Lys Ser Pro Ser Arg Asn Leu Ala Ser Arg Glu Arg Ile Tyr Lys Asn
        35                  40                  45

Tyr Gly Val Ala Gly Pro Ala Ser Ala Leu Ser Ser
    50                  55                  60
```

```
<210> 333
<211> 60
<212> PRT
<213> Homo sapiens

<400> 333
Leu Ser His Lys Leu Lys Gly Asp Arg Gly Asn Ile Ser Thr Ser Ser
 1               5               10                  15

Lys Pro Ala Ser Thr Ser Gly Lys Ser Glu Leu Ser Ser Lys His Ser
            20                  25                  30
```

Arg Ser Leu Lys Pro Asp Gly Arg Met Ser Arg Thr Thr Ala Asp Gln
         35   40   45

Lys Lys Pro Arg Gly Thr Glu Ser Leu Ser Ala Ser
     50   55   60

<210> 334
<211> 62
<212> PRT
<213> Homo sapiens

<400> 334
Glu Ser Leu Ile Leu Lys Ser Asp Ala Ala Lys Leu Arg Ser Asp Ser
 1   5   10   15

His Ser Arg Ser Leu Ser Pro Asn His Asn Thr Leu Gln Thr Leu Lys
         20   25   30

Ser Asp Gly Arg Met Pro Ser Ser Ser Arg Ala Glu Ser Pro Gly Pro
         35   40   45

Gly Ser Arg Leu His Leu Leu Ser Gln Arg Leu Ser Gln Gln
     50   55   60

<210> 335
<211> 487
<212> PRT
<213> Homo sapiens

<400> 335
Met Val Glu Phe Cys Glu Ser Asp Glu Gly Glu Ala Trp Ser Leu Ala
 1   5   10   15

Arg Asp Arg Gly Gly Asn Gln Tyr Leu Arg His Glu Asp Glu Gln Ala
         20   25   30

Leu Leu Asp Gln Asn Ser Gln Thr Pro Pro Pro Ser Pro Phe Ser Val
         35   40   45

Gln Ala Phe Asn Lys Gly Ala Ser Cys Ser Ala Gln Gly Phe Asp Tyr
     50   55   60

Gly Leu Gly Asn Ser Lys Gly Asp Gln Leu Ser Ala Ile Leu Asn Ser
 65   70   75   80

Ile Gln Ser Arg Pro Asn Leu Pro Ala Pro Ser Ile Phe Asp Gln Ala
             85   90   95

Ala Lys Pro Pro Ser Ser Leu Val His Ser Pro Phe Val Phe Gly Gln
         100   105   110

Pro Leu Ser Phe Gln Gln Pro Gln Leu Gln Lys Ser Pro Ser Arg Asn
         115   120   125

Leu Ala Ser Arg Glu Arg Ile Tyr Lys Asn Tyr Gly Val Ala Gly Pro
     130   135   140

Ala Ser Ala Leu Ser Ser Leu Ser His Lys Leu Lys Gly Asp Arg Gly
145   150   155   160

Asn Ile Ser Thr Ser Ser Lys Pro Ala Ser Thr Ser Gly Lys Ser Glu
             165   170   175

```
Leu Ser Ser Lys His Ser Arg Ser Leu Lys Pro Asp Gly Arg Met Ser
            180             185             190

Arg Thr Thr Ala Asp Gln Lys Lys Pro Arg Gly Thr Glu Ser Leu Ser
        195             200             205

Ala Ser Glu Ser Leu Ile Leu Lys Ser Asp Ala Ala Lys Leu Arg Ser
    210             215             220

Asp Ser His Ser Arg Ser Leu Ser Pro Asn His Asn Thr Leu Gln Thr
225             230             235             240

Leu Lys Ser Asp Gly Arg Met Pro Ser Ser Ser Arg Ala Glu Ser Pro
            245             250             255

Gly Pro Gly Ser Arg Leu Ser Ser Pro Lys Pro Lys Thr Leu Pro Ala
            260             265             270

Asn Arg Ser Ser Pro Ser Gly Ala Ser Ser Pro Arg Ser Ser Ser Pro
            275             280             285

His Asp Lys Asn Leu Pro Gln Lys Ser Thr Ala Pro Val Lys Thr Lys
    290             295             300

Leu Asp Pro Pro Arg Glu Arg Ser Lys Ser Asp Ser Tyr Thr Leu Asp
305             310             315             320

Pro Asp Thr Leu Arg Lys Lys Lys Met Pro Leu Thr Glu Pro Leu Arg
            325             330             335

Gly Arg Ser Thr Ser Pro Lys Pro Lys Ser Val Pro Lys Asp Ser Thr
            340             345             350

Asp Ser Pro Gly Ser Glu Asn Arg Ala Pro Ser Pro His Val Val Gln
        355             360             365

Glu Asn Leu His Ser Glu Val Val Glu Val Cys Thr Ser Ser Thr Leu
    370             375             380

Lys Thr Asn Ser Leu Thr Asp Ser Thr Cys Asp Asp Ser Ser Glu Phe
385             390             395             400

Lys Ser Val Asp Glu Gly Ser Asn Lys Val His Phe Ser Ile Gly Lys
            405             410             415

Ala Pro Leu Lys Asp Glu Gln Glu Met Arg Ala Ser Pro Lys Ile Ser
            420             425             430

Arg Lys Cys Ala Asn Arg His Thr Arg Pro Lys Lys Glu Lys Ser Ser
            435             440             445

Phe Leu Phe Lys Gly Asp Gly Ser Gly Ala Phe Arg Ala Ser Gln Ser
    450             455             460

Lys Pro Cys Leu Leu Leu Trp Pro Asn Val Pro Glu Leu Cys Leu Leu
465             470             475             480

Pro Ser Ser Gly Met Lys Ala
            485
```

<210> 336
<211> 526
<212> PRT
<213> Homo sapiens

```
<400> 336
Asn Gly Tyr Thr Glu Ala Trp Cys Leu Ser Phe Asn Gln His Leu Gly
 1               5                   10                  15

Lys Ser Leu Leu Val Pro Val Asp Val Thr Asn Ser Glu Gly Thr Trp
            20              25                  30

Val Gln Leu Asp Gln Asn Ser Met Val Glu Phe Cys Glu Ser Asp Glu
        35                  40                  45

Gly Glu Ala Trp Ser Leu Ala Arg Asp Arg Gly Gly Asn Gln Tyr Leu
    50                  55                  60

Arg His Glu Asp Glu Gln Ala Leu Leu Asp Gln Asn Ser Gln Thr Pro
65                  70                  75                  80

Pro Pro Ser Pro Phe Ser Val Gln Ala Phe Asn Lys Gly Ala Ser Cys
            85                  90                  95

Ser Ala Gln Gly Phe Asp Tyr Gly Leu Gly Asn Ser Lys Gly Asp Gln
            100                 105                 110

Leu Ser Ala Ile Leu Asn Ser Ile Gln Ser Arg Pro Asn Leu Pro Ala
        115                 120                 125

Pro Ser Ile Phe Asp Gln Ala Ala Lys Pro Pro Ser Ser Leu Val His
    130                 135                 140

Ser Pro Phe Val Phe Gly Gln Pro Leu Ser Phe Gln Gln Pro Gln Leu
145                 150                 155                 160

Gln Lys Ser Pro Ser Arg Asn Leu Ala Ser Arg Glu Arg Ile Tyr Lys
            165                 170                 175

Asn Tyr Gly Val Ala Gly Pro Ala Ser Ala Leu Ser Ser Leu Ser His
        180                 185                 190

Lys Leu Lys Gly Asp Arg Gly Asn Ile Ser Thr Ser Ser Lys Pro Ala
        195                 200                 205

Ser Thr Ser Gly Lys Ser Glu Leu Ser Ser Lys His Ser Arg Ser Leu
    210                 215                 220

Lys Pro Asp Gly Arg Met Ser Arg Thr Thr Ala Asp Gln Lys Lys Pro
225                 230                 235                 240

Arg Gly Thr Glu Ser Leu Ser Ala Ser Glu Ser Leu Ile Leu Lys Ser
            245                 250                 255

Asp Ala Ala Lys Leu Arg Ser Asp Ser His Ser Arg Ser Leu Ser Pro
            260                 265                 270

Asn His Asn Thr Leu Gln Thr Leu Lys Ser Asp Gly Arg Met Pro Ser
    275                 280                 285

Ser Ser Arg Ala Glu Ser Pro Gly Pro Gly Ser Arg Leu Ser Ser Pro
    290                 295                 300

Lys Pro Lys Thr Leu Pro Ala Asn Arg Ser Ser Pro Ser Gly Ala Ser
305                 310                 315                 320

Ser Pro Arg Ser Ser Ser Pro His Asp Lys Asn Leu Pro Gln Lys Ser
            325                 330                 335

Thr Ala Pro Val Lys Thr Lys Leu Asp Pro Pro Arg Glu Arg Ser Lys
        340                 345                 350
```

```
Ser Asp Ser Tyr Thr Leu Asp Pro Asp Thr Leu Arg Lys Lys Lys Met
        355                 360                 365

Pro Leu Thr Glu Pro Leu Arg Gly Arg Ser Thr Ser Pro Lys Pro Lys
    370             375                 380

Ser Val Pro Lys Asp Ser Thr Asp Ser Pro Gly Ser Glu Asn Arg Ala
385                 390                 395                 400

Pro Ser Pro His Val Val Gln Glu Asn Leu His Ser Glu Val Val Glu
            405                 410                 415

Val Cys Thr Ser Ser Thr Leu Lys Thr Asn Ser Leu Thr Asp Ser Thr
        420             425                 430

Cys Asp Asp Ser Ser Glu Phe Lys Ser Val Asp Glu Gly Ser Asn Lys
    435             440                 445

Val His Phe Ser Ile Gly Lys Ala Pro Leu Lys Asp Glu Gln Glu Met
    450             455                 460

Arg Ala Ser Pro Lys Ile Ser Arg Lys Cys Ala Asn Arg His Thr Arg
465             470             475                 480

Pro Lys Lys Glu Lys Ser Ser Phe Leu Phe Lys Gly Asp Gly Ser Gly
            485                 490                 495

Ala Phe Arg Ala Ser Gln Ser Lys Pro Cys Leu Leu Leu Trp Pro Asn
        500                 505                 510

Val Pro Glu Leu Cys Leu Leu Pro Ser Ser Gly Met Lys Ala
    515                 520                 525
```

```
<210> 337
<211> 112
<212> PRT
<213> Homo sapiens

<400> 337
Asn Gly Tyr Thr Glu Ala Trp Cys Leu Ser Phe Asn Gln His Leu Gly
  1           5               10                  15

Lys Ser Leu Leu Val Pro Val Asp Val Thr Asn Ser Glu Gly Thr Trp
            20              25                  30

Val Gln Leu Asp Gln Asn Ser Met Val Glu Phe Cys Glu Ser Asp Glu
        35              40                  45

Gly Glu Ala Trp Ser Leu Ala Arg Asp Arg Gly Gly Asn Gln Tyr Leu
    50              55                  60

Arg His Glu Asp Glu Gln Ala Leu Leu Asp Gln Asn Ser Gln Thr Pro
65              70                  75                  80

Pro Pro Ser Pro Phe Ser Val Gln Ala Phe Asn Lys Gly Ala Ser Cys
            85                  90                  95

Ser Ala Gln Gly Phe Asp Tyr Gly Leu Gly Asn Ser Lys Gly Asp Gln
        100             105                 110
```

<210> 338
<211> 22
<212> PRT
<213> Homo sapiens

<400> 338
Asn Gly Tyr Thr Glu Ala Trp Cys Leu Ser Phe Asn Gln His Leu Gly
 1   5   10   15

Lys Ser Leu Leu Val Pro
                20

<210> 339
<211> 98
<212> PRT
<213> Homo sapiens

<400> 339
Leu Gly Lys Ser Leu Leu Val Pro Val Asp Val Thr Asn Ser Glu Gly
 1   5   10   15

Thr Trp Val Gln Leu Asp Gln Asn Ser Met Val Glu Phe Cys Glu Ser
                20   25   30

Asp Glu Gly Glu Ala Trp Ser Leu Ala Arg Asp Arg Gly Gly Asn Gln
            35   40   45

Tyr Leu Arg His Glu Asp Glu Gln Ala Leu Leu Asp Gln Asn Ser Gln
    50   55   60

Thr Pro Pro Pro Ser Pro Phe Ser Val Gln Ala Phe Asn Lys Gly Ala
65   70   75   80

Ser Cys Ser Ala Gln Gly Phe Asp Tyr Gly Leu Gly Asn Ser Lys Gly
                85   90   95

Asp Gln

<210> 340
<211> 301
<212> PRT
<213> Homo sapiens

<400> 340
Lys Gly Asp Arg Gly Asn Ile Ser Thr Ser Ser Lys Pro Ala Ser Thr
 1   5   10   15

Ser Gly Lys Ser Glu Leu Ser Ser Lys His Ser Arg Ser Leu Lys Pro
                20   25   30

Asp Gly Arg Met Ser Arg Thr Thr Ala Asp Gln Lys Lys Pro Arg Gly
            35   40   45

Thr Glu Ser Leu Ser Ala Ser Glu Ser Leu Ile Leu Lys Ser Asp Ala
    50   55   60

Ala Lys Leu Arg Ser Asp Ser His Ser Arg Ser Leu Ser Pro Asn His
65   70   75   80

Asn Thr Leu Gln Thr Leu Lys Ser Asp Gly Arg Met Pro Ser Ser Ser
                85   90   95

Arg Ala Glu Ser Pro Gly Pro Gly Ser Arg Leu Ser Ser Pro Lys Pro

```
                100                     105                     110

Lys Thr Leu Pro Ala Asn Arg Ser Ser Pro Ser Gly Ala Ser Ser Pro
        115             120             125

Arg Ser Ser Ser Pro His Asp Lys Asn Leu Pro Gln Lys Ser Thr Ala
    130             135             140

Pro Val Lys Thr Lys Leu Asp Pro Pro Arg Glu Arg Ser Lys Ser Asp
145             150             155                         160

Ser Tyr Thr Leu Asp Pro Asp Thr Leu Arg Lys Lys Lys Met Pro Leu
            165             170             175

Thr Glu Pro Leu Arg Gly Arg Ser Thr Ser Pro Lys Pro Lys Ser Val
        180             185             190

Pro Lys Asp Ser Thr Asp Ser Pro Gly Ser Glu Asn Arg Ala Pro Ser
        195             200             205

Pro His Val Val Gln Glu Asn Leu His Ser Glu Val Val Glu Val Cys
    210             215             220

Thr Ser Ser Thr Leu Lys Thr Asn Ser Leu Thr Asp Ser Thr Cys Asp
225             230             235             240

Asp Ser Ser Glu Phe Lys Ser Val Asp Glu Gly Ser Asn Lys Val His
            245             250             255

Phe Ser Ile Gly Lys Ala Pro Leu Lys Asp Glu Gln Glu Met Arg Ala
            260             265             270

Ser Pro Lys Ile Ser Arg Lys Cys Ala Asn Arg His Thr Arg Pro Lys
        275             280             285

Lys Glu Lys Ser Ser Phe Leu Phe Lys Gly Asp Gly Ser
    290             295             300
```

<210> 341
<211> 196
<212> PRT
<213> Homo sapiens

<400> 341

```
Ser Gln Pro Lys Gln Ala Met Ser Pro Ser Val Ala Glu Cys Ala Arg
 1               5               10                      15

Ala Val Phe Ala Ser Phe Leu Trp His Glu Gly Ile Val Met Met His
            20              25                      30

Gly Leu Ser Ser Phe Leu Lys Phe His Pro Glu Leu Ser Lys Glu His
        35              40                      45

Ala Pro Ile Arg Ser Ser Leu Asn Ser Gln Gln Pro Thr Glu Glu Lys
    50              55                      60

Glu Thr Lys Leu Glu Asn Arg His Ser Leu Glu Ile Ser Ser Ala Leu
65              70                      75                      80

Asn Met Phe Asn Ile Ala Pro His Gly Pro Asp Ile Ser Lys Met Gly
                85                      90                      95

Ser Ile Asn Lys Asn Lys Val Leu Ser Met Leu Lys Glu Pro Pro Leu
            100             105                     110
```

```
His Glu Lys Cys Glu Asp Gly Lys Thr Glu Thr Thr Phe Glu Met Ser
        115             120             125

Met His Asn Thr Met Lys Ser Lys Ser Pro Leu Pro Leu Thr Leu Gln
    130             135             140

His Leu Val Ala Phe Trp Glu Asp Ile Ser Leu Ala Thr Ile Lys Ala
145             150             155             160

Ala Ser Gln Asn Met Ile Phe Pro Ser Pro Gly Ser Cys Ala Val Leu
            165             170             175

Lys Lys Lys Glu Cys Glu Lys Glu Asn Lys Lys Ser Lys Lys Glu Lys
            180             185             190

Lys Lys Lys Lys
        195


<210> 342
<211> 190
<212> PRT
<213> Homo sapiens

<400> 342
Met Ser Pro Ser Val Ala Glu Cys Ala Arg Ala Val Phe Ala Ser Phe
 1           5               10              15

Leu Trp His Glu Gly Ile Val Met Met His Gly Leu Ser Ser Phe Leu
            20              25              30

Lys Phe His Pro Glu Leu Ser Lys Glu His Ala Pro Ile Arg Ser Ser
            35              40              45

Leu Asn Ser Gln Gln Pro Thr Glu Glu Lys Glu Thr Lys Leu Glu Asn
    50              55              60

Arg His Ser Leu Glu Ile Ser Ser Ala Leu Asn Met Phe Asn Ile Ala
65              70              75              80

Pro His Gly Pro Asp Ile Ser Lys Met Gly Ser Ile Asn Lys Asn Lys
            85              90              95

Val Leu Ser Met Leu Lys Glu Pro Pro Leu His Glu Lys Cys Glu Asp
            100             105             110

Gly Lys Thr Glu Thr Thr Phe Glu Met Ser Met His Asn Thr Met Lys
        115             120             125

Ser Lys Ser Pro Leu Pro Leu Thr Leu Gln His Leu Val Ala Phe Trp
    130             135             140

Glu Asp Ile Ser Leu Ala Thr Ile Lys Ala Ala Ser Gln Asn Met Ile
145             150             155             160

Phe Pro Ser Pro Gly Ser Cys Ala Val Leu Lys Lys Lys Glu Cys Glu
            165             170             175

Lys Glu Asn Lys Lys Ser Lys Lys Glu Lys Lys Lys Lys Lys
            180             185             190


<210> 343
<211> 26
<212> PRT
<213> Homo sapiens
```

<400> 343
Lys Gln Ala Met Ser Pro Ser Val Ala Glu Cys Ala Arg Ala Val Phe
 1   5   10   15

Ala Ser Phe Leu Trp His Glu Gly Ile Val
            20   25

<210> 344
<211> 162
<212> PRT
<213> Homo sapiens

<400> 344
Ser Ser Phe Leu Lys Phe His Pro Glu Leu Ser Lys Glu His Ala Pro
 1   5   10   15

Ile Arg Ser Ser Leu Asn Ser Gln Gln Pro Thr Glu Glu Lys Glu Thr
            20   25   30

Lys Leu Glu Asn Arg His Ser Leu Glu Ile Ser Ser Ala Leu Asn Met
            35   40   45

Phe Asn Ile Ala Pro His Gly Pro Asp Ile Ser Lys Met Gly Ser Ile
     50   55   60

Asn Lys Asn Lys Val Leu Ser Met Leu Lys Glu Pro Pro Leu His Glu
 65   70   75   80

Lys Cys Glu Asp Gly Lys Thr Glu Thr Thr Phe Glu Met Ser Met His
                85   90   95

Asn Thr Met Lys Ser Lys Ser Pro Leu Pro Leu Thr Leu Gln His Leu
            100   105   110

Val Ala Phe Trp Glu Asp Ile Ser Leu Ala Thr Ile Lys Ala Ala Ser
            115   120   125

Gln Asn Met Ile Phe Pro Ser Pro Gly Ser Cys Ala Val Leu Lys Lys
     130   135   140

Lys Glu Cys Glu Lys Glu Asn Lys Lys Ser Lys Lys Glu Lys Lys Lys
145   150   155   160

Lys Lys